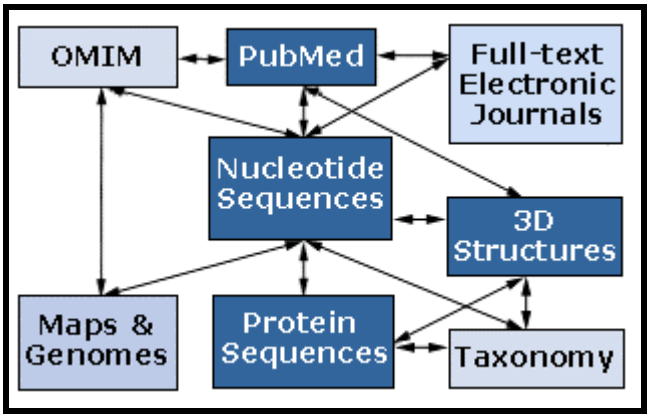
(http://pubmed.gov)

- PubMed is a World Wide Web (WWW) database developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM).
- PubMed is one of several databases under NCBI's Entrez retrieval system.
- PubMed provides access, free of charge, to MEDLINE, a database of over 11 million bibliographic citations.
- PubMed also has links to the full-text versions of articles at participating publishers' Web sites, biological data, sequence centers, etc. from third parties.
- PubMed provides access and links to the integrated molecular biology databases maintained by NCBI. These databases contain: DNA and protein sequences, genome mapping data, and 3-D protein structures, aligned sequences from populations, and the Online Mendelian Inheritance in Man (OMIM).

Interrelationships between Entrez Databases

- Links between MEDLINE records and sequence records make it easy to look up MEDLINE abstracts associated with sequence records and vice versa.
- The following diagram illustrates the relationships been the information resources in Entrez:



Publisher Supplied Citations

- These are citations that are electronically supplied by publishers and sent directly to PubMed. The citations are then forwarded to NLM's Indexing Section to be processed.

- Citations received electronically have the tag: **[PubMed - as supplied by publisher]**.

- When we begin processing a citation, the **[PubMed - in process]** tag replaces the **[PubMed - as supplied by publisher]** tag.

- Once indexing is complete, the MEDLINE citation is tagged as **[PubMed - indexed for MEDLINE]**.

Sample PubMed citation that has been electronically submitted but processing has not yet begun:

Notice the [PubMed – as supplied by publisher] tag.

LiCalsi C, Maniaci MJ, Christensen T, Phillips E, Ward GH, Witham C.

A powder formulation of measles vaccine for aerosol delivery.
Vaccine. 2001 Mar 21;19(17-19):2629-2636.
PMID: 11257402 [PubMed - as supplied by publisher]

In Process

- MEDLINE in process records provide basic citation information and abstracts before the citation is indexed with NLM's MeSH headings and NLM's quality assurance staff have checked the records for errors.

- In process records carry the tag: **[PubMed – in process]** and are added to PubMed Tuesday-Saturday.

Sample of an In Process citation in PubMed:

Notice the [PubMed – in process] tag.

LiCalsi C, Maniaci MJ, Christensen T, Phillips E, Ward GH, Witham C.

A powder formulation of measles vaccine for aerosol delivery.
Vaccine. 2001 Mar 21;19(17-19):2629-36.
PMID: 11257402 [PubMed - in process]

MEDLINE

- NLM's premier bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, the preclinical sciences, and some other areas of the life sciences.

- Contains bibliographic citations and author abstracts from more than 4,300 current biomedical journals published in the United States and 70 other countries. Coverage is worldwide, but most records are from English-language sources or have English abstracts. Approximately 76% of MEDLINE records include abstracts as they appear in the journal.

- There are currently 11 million records dating from 1966 to present. MEDLINE is updated weekly and records are incorporated into PubMed weekly.

- After MeSH terms, Publication Types, and other indexing terms are added, the in process citations graduate to MEDLINE records. These "completed" records are also checked for accuracy.

- Fully indexed MEDLINE records are tagged **[PubMed – indexed for MEDLINE].**

Sample MEDLINE citation in PubMed

Notice the [PubMed – indexed for MEDLINE] tag.

LiCalsi C, Maniaci MJ, Christensen T, Phillips E, Ward GH, Witham C.
A powder formulation of measles vaccine for aerosol delivery.
Vaccine. 2001 Mar 21;19(17-19):2629-36.
PMID: 11257402 [PubMed - indexed for MEDLINE]

Other Publisher Supplied Citations

- Some of the citations received electronically from publishers may never become MEDLINE citations.
- These records are assigned PMIDs but are not assigned MeSH terms because they do not go through the indexing process.
- These records carry the notation **[PubMed – as supplied by publisher]** and remain in PubMed even though they are not technically MEDLINE citations.
- There are two sources of these types of records.

1. Out-of-scope articles from selectively indexed MEDLINE journals

- This may occur when a particular article in a selectively indexed journal is out-of-scope for MEDLINE (such as a geology article in a general scientific journal like *Science* or *Nature*), **and** the publisher provides PubMed with electronic information for the entire journal.

Sample of an out-of-scope article from a selectively indexed, electronically submitted, MEDLINE journal that remains in PubMed:

Notice the [PubMed – as supplied by publisher] tag.

Arrigo KR, Worthen DL, Lizotte MP, Dixon P, Dieckmann G.
Primary Production in Antarctic Sea Ice
Science. 1997 Apr 18;276(5311):394-7.
PMID: 9103193 [PubMed - as supplied by publisher]

Sample citation from the same selectively indexed, electronically submitted journal that *is* indexed for MEDLINE:

Notice the [PubMed-indexed for MEDLINE] tag.

Achatz G, Nitschke L, Lamers MC.
Effect of transmembrane and cytoplasmic domains of IgE on the IgE response.
Science. 1997 Apr 18;276(5311):409-11.
PMID: 9103198 [PubMed - indexed for MEDLINE]

2. Citations from back issues of newly-indexed MEDLINE journals

- If publishers choose to supply NLM with electronic data from back issues of newly-indexed MEDLINE journals, those citations will be entered into PubMed.

- These earlier citations will have no MeSH headings.

Example: NLM began indexing the journal, *Molecular Diagnosis* with v. 4, no. 1, 1999. However, the publisher supplied us with citations from earlier issues. The citations from back issues were entered into PubMed but will not be indexed with MeSH headings.

This citation from volume 2, 1997 carries the [PubMed – as supplied by publisher] tag.

Dhir R, Gau JT, Krill D, Bastacky S, Bahnson RR, Cooper DL, Becich MJ.
CD44 Expression in Benign and Neoplastic Human Prostates.
Mol Diagn. 1997 Sep;2(3):197-204.
PMID: 10462610 [PubMed - as supplied by publisher]

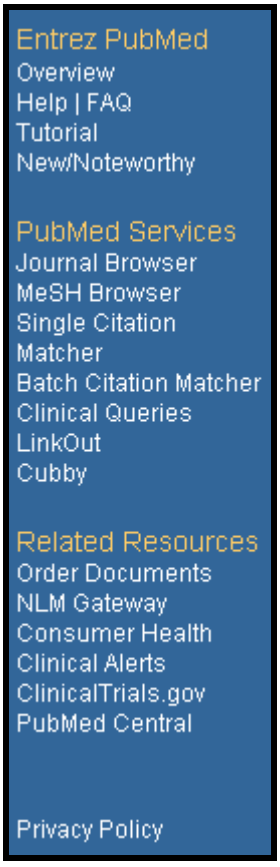
This citation from volume 4, 1999 carries the [PubMed – indexed for MEDLINE] tag.

Miller JE, Wilson SS, Jaye DL, Kronenberg M.
An automated semiquantitative B and T cell clonality assay.
Mol Diagn. 1999 Jun;4(2):101-17.
PMID: 10462626 [PubMed - indexed for MEDLINE]

Indexing information for a particular journal can be found in the "Indexed In" field of the Details format of LOCATOR*plus* (NLM's Integrated Library System).

PubMed's Home Page

The Sidebar



Entrez PubMed

- The **Overview** provides a detailed description of the PubMed database including database coverage and PubMed journal information.
- Click on **Help** to get detailed descriptions of all the features and search and retrieval options within PubMed. **FAQs** are frequently asked questions about PubMed.
- Click on **Tutorial** for a Web-based, interactive training program.
- The **New/Noteworthy** link provides information about recent and future PubMed system enhancements.

PubMed Services

- Use the **Journal Browser** to search for journals by journal title, title abbreviation, or the International Standard Serial Number (ISSN). The list of journals with links to full-text is also included in the browser.
- The **MeSH Browser** allows you to browse the MeSH Vocabulary in a hierarchical structure.
- The **Single Citation Matcher** is a fill-in-the-blank form that allows users to enter journal citation information to locate a specific single article or the contents of an individual issue of a journal.
- The **Batch Citation Matcher** is primarily a tool for publishers. It allows publishers to retrieve the PubMed IDs for many articles all at once. This feature requires that bibliographic information (journal, volume, page) be entered in a specific format.
- The **Clinical Queries** page was designed for clinicians and has built-in search "filters" that focus retrieval in four study categories: therapy, diagnosis, etiology, and prognosis.
- **LinkOut** provides users with links from PubMed and other Entrez databases to a wide variety of relevant web-accessible online resources including full-text publications. This information is intended for groups who want to provide links that PubMed searchers may be interested in using.
- The **Cubby** stores search strategies that may be updated at any time, and LinkOut preferences to specify which LinkOut providers you want displayed in PubMed.

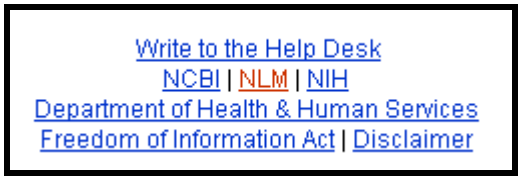
Related Resources

- **Order Documents** is a link to the Loansome Doc feature that allows users to order full-text copies of articles from a local medical library (local fees and delivery methods may vary).
- Click on the **NLM Gateway** to access NLM's other Web-based service, which also provides access to MEDLINE and additional NLM databases.
- **Consumer Health** is a link to MEDLINE*plus*, NLM's Web site for consumer health information.
- **Clinical Alerts** expedite the release of findings from the NIH-funded clinical trials where such release could significantly affect morbidity and mortality.
- Click on **ClinicalTrials.gov** to access the NIH/NLM Web site for current information about clinical research studies.

Privacy Policy

The National Center for Biotechnology Information's Privacy Policy for PubMed users.

The Footnote



- Click on **Write to the Help Desk** to send an e-mail message to NLM Customer Service.
- Click on **NCBI, NLM, NIH** or **Department of Health & Human Services** to access the Web pages of the agencies responsible for the creation and maintenance of PubMed.
- Click on **Freedom of Information Act** (FOIA) to access the NIH FOIA Home Page.
- Click on **Disclaimer** to obtain information on copyright status, disclaimer of liability and endorsement, and NLM downloading policy.

Searching With PubMed

PubMed provides a variety of search modes to meet users' individual needs. You can run a simple search by entering a few search terms in the query box or construct complex search strategies using Boolean commands and using the various functions provided by the Features bar.

PubMed's Features bar provides additional search options:

- Limits
- Preview/Index
- History
- Clipboard

In addition, these search features are also available:

- The MeSH Browser
- Clinical Queries
- The Journal Browser
- The Single Citation Matcher
- Cubby

PubMed makes use of **cookies** and **JavaScript** from your Web browser for several functions. Please enable cookies and JavaScript from your Web browser. These selections may be found under the Edit menu, and then under Preferences (Netscape), or the Tools menu under Internet Options (Internet Explorer). For more information about cookies, see PubMed's Help.

How it Works

Subject Searching

Search Request: ***Find citations to articles about gallstones and pain***.

Entering Search Terms

- Enter significant terms in the query box (e.g., ***gallstones pain***).
- Click on the **Go** button.
- Use the **Clear** button to erase the contents of the query box.

What is searched?

- PubMed uses Automatic Term Mapping

Unqualified terms that are entered in the query box are matched against (in this order):

1. MeSH (Medical Subject Headings) Translation Table
2. Journals Translation Table
3. Phrase List
4. Author Index

1. MeSH Translation Table contains**:**

- MeSH Terms
- Subheadings
- See-Reference mappings (also known as entry terms) for MeSH Heading terms
- Mappings derived from the Unified Medical Language System (UMLS) that have equivalent synonyms or lexical variants in English
- Names of Substances and synonyms to the Names of Substances

If a match is found in this translation table, the term will be mapped to the appropriate MeSH term and searched as MeSH **and** as a Text Word.

Example:

PubMed Translation: ("cholelithiasis"[MeSH Terms] OR gallstones[Text Word])

- Gallstones is an entry term for the MeSH term Cholelithiasis.

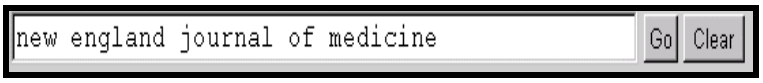
When a term is searched as a MeSH Heading, PubMed automatically searches that heading and the more specific headings underneath in the hierarchy. This is called exploding a term.

For example, the MeSH term **Cholelithiasis** when searched as a MeSH Term in PubMed will search the heading Cholelithiasis as well as the more specific term(s) in the hierarchy:

2. Journals Translation Table contains**:**

- Full journal title
- MEDLINE abbreviation
- International Standard Serial Number (ISSN)

Example:



PubMed Translation: ("N Engl J Med" [Journal Name])

If a journal name is also a MeSH heading, PubMed will search the unqualified term both as a MeSH heading and as a Text Word. However, the search will ***not*** include the term as a journal name. For example, the search for Science unqualified will not search for citations from the journal, *Science*.

3. Phrase List contains**:**

If no match is found in the MeSH or Journals Translation Tables, PubMed consults a phrase list containing several hundred thousand phrases generated from:

- MeSH
- Unified Medical Language System (UMLS)
- Names of Substances

Example:

PubMed Translation: cold compresses [All Fields]

- PubMed does not find this phrase in the MeSH Translation Table or the Journal Translation Table, but does find it in the Phrase List.

4. Author Index

- If the phrase is not found in the MeSH or Journal Translation Tables or the Phrase List **and** is a word with one or two letters after it, PubMed then checks the Author Index.

- Enter the author's name in the form of Last Name (space) Initials:

Examples:

o'brien jm
adams sh
pogonka t

- If only the first initial is used, PubMed automatically truncates the author's name to account for varying initials.

Example:

- This search retrieves citations to articles written by o'brien j, o'brien ja, o'brien jz, etc.

- If only an author's last name is entered, PubMed will search that name in All Fields (Author field plus all other searchable fields). It will not default to the Author Index because the last name is not followed by initial(s).

If no match is found?

- PubMed breaks apart the phrase and repeats the above process until a match is found.
- If there is no match, the individual terms will be combined (ANDed) together and searched in All Fields.

Example:

PubMed Translation:

((pressure [MeSH Terms] OR pressure[Text Word]) AND point[All Fields])

- PubMed breaks apart a long phrase from right to left:

Example:

Searches for:	Results:	Action:
head lice shampoo	No match found	Removes term on right to re-run Automatic Term Mapping process.
head lice	Match found in MeSH Translation Table	***head lice*** will be searched as ***pediculus[MeSH Terms] OR head lice[Text Word]***
shampoo	No match found in Translation Tables	***shampoo*** will be searched as ***shampoo[All Fields]***

PubMed then combines (ANDs) the found matches to produce a single search strategy:

pediculus[MeSH Terms] OR head lice[Text Word]
AND
shampoo[All Fields]

Phrase Searching (forcing PubMed to search for a phrase)

- PubMed does not actually perform adjacency searching but uses a list of recognized phrases, the Phrase List, against which search terms are matched. PubMed may fail to find a phrase because it is not in the Phrase List.
- The use of quotes around a phrase forces PubMed to check PubMed's Index to attempt to find the phrase. The Index contains several million phrases generated from:
    - citation titles & abstracts
    - UMLS
    - MeSH vocabulary

Example:

PubMed Translation:

(("pressure" [MeSH Terms] OR pressure[Text Word]) AND point[All Fields])

- PubMed does not recognize this as a phrase. PubMed searches for "pressure" and "point" separately.

To search for a specific phrase in the Index, enter double quotes ("") around the phrase.

- Your phrase may actually appear in citation and abstract data, but may ***not*** be in ***either*** the PubMed Phrase List or Index. If this is the case, the double quotes are ignored and the phrase is processed using Automatic Term Mapping.

When you enclose a phrase in double quotes, PubMed will ***not*** perform automatic term mapping which includes explosions of MeSH terms. For example, "health planning " ***will*** include citations that are indexed to the MeSH heading, Health Planning, but ***will not*** include the more specific indentations (e.g., Health Care Rationing, Health Care Reform) that are included with automatic MeSH mapping and explosion.

Truncation (finding all terms that begin with a given text string):

- Place an asterisk (*) at the end of a term to search for all terms that begin with that word. The asterisk may only be used at the ***end*** of a string of characters.

Example: mimick* will find all terms that begin with the letters mimick; e.g., mimick, mimicked, mimicks, mimicking.

- PubMed uses the first 150 variations of a truncated term. If a truncated term, e.g., staph*, produces more than 150 variations, PubMed displays the following warning message on the Results screen in pink near the top of the screen:

Wildcard search for 'staph*' used only the first 150 variations. Lengthen the root word to search for all endings.

1. PubMed has no single character truncation.

2 PubMed processes up to 150 variations of a truncated term.

3. PubMed ***does not*** cross a space boundary. Phrases that include a space in a word after the asterisk will ***not*** be included as a search term. For example, if you truncate “infection*”, the search term “infection control ” will not be included.

4. Truncation turns off automatic term mapping. For example, heart attack* will not map to the MeSH term, Myocardial Infarction or include any of its more specific indentions.

PubMed Stopword List

PubMed also refers to a list of commonly found terms that are referred to as “stopwords.” Stopwords will not be included in your search. This list is available in PubMed’s Help.

N O T E S

Search Results Screen

Once you click on **Go** or press the Enter key, PubMed will automatically:

- Run the search
- Retrieve and display citations

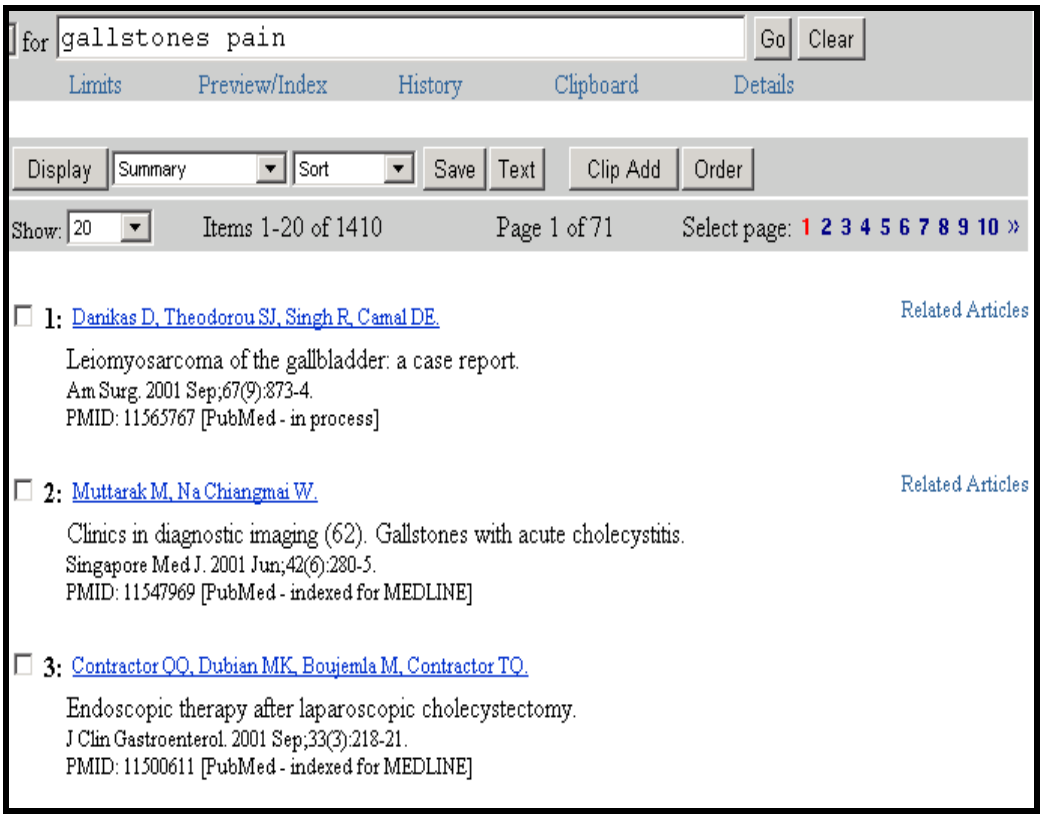
The following is the Results screen returned by PubMed for the search example:

Find citations to articles about gallstones and pain.

*Live **query box** displaying current search.*

***Display** options*
***Sort** options*
***Show** pull-down*
***Save** button*
***Text** button*
***Clip Add** button*
***Order** button*

Citations are displayed in Summary format



See next page for further explanation.

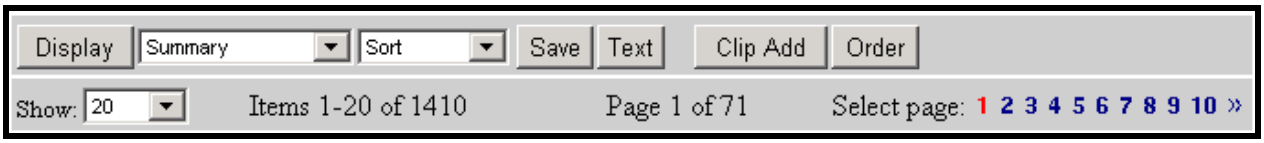
Results Screen

Query Box containing current search

- The query box displays **your** search.
- This box is active; you can modify the current search by adding or eliminating terms and clicking on the **Go** button.
- Click on the **Clear** button to clear the search in the query box and start a new search.

Action Bar Selections

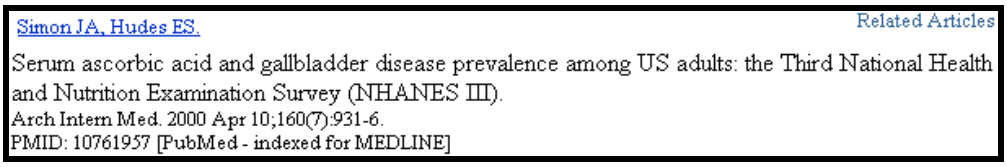
- These options are available both at the top and bottom of the Results screens.
- The next few workbook pages will explain each function.



Display Options

Summary Format

PubMed citations are initially displayed in the **Summary** format.


Simon JA, Hudes ES. Related Articles
Serum ascorbic acid and gallbladder disease prevalence among US adults: the Third National Health and Nutrition Examination Survey (NHANES III).
Arch Intern Med. 2000 Apr 10;160(7):931-6.
PMID: 10761957 [PubMed - indexed for MEDLINE]

The summary format consists of the following:

- **Author Name(s):** All authors from the record are displayed.
- **Links:** Available links such as Related Articles, Protein, Nucleotide, etc. (LinkOut, Books not displayed in the Summary format.)
- **Title of the article:** Foreign language titles will be translated into English and placed within brackets.
- **Source:** Provides journal title abbreviation, date of publication, volume, issue, and pagination. Will also include language (for non-English articles) and Publication Type if the article is a review or retracted publication. Articles without abstracts will display the notation: "No abstract available".
- PubMed Unique Identifier (PMID).
- **[PubMed - as supplied by publisher],** or [**PubMed - in process],** or **[PubMed - indexed for MEDLINE]** tag.

Additional Display Options

You can access other display formats from the Results screen in the following manner:

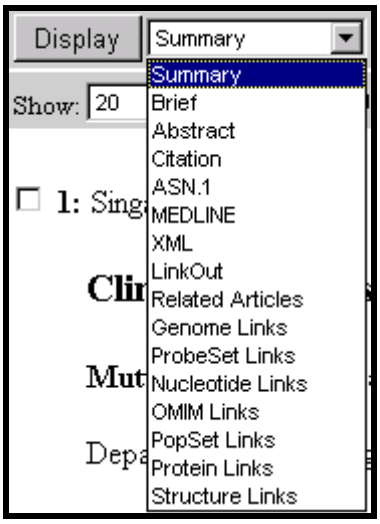
- **Individual Citations:** Clicking on the Author name hyperlink will display the citation in the Abstract display format.

- **All Citations:** Clicking on the **Display** button without selecting any of the citations will display all of the citations listed on the page in the selected display format. Summary is the default format.

- **Selected Citations**: Clicking on the box found to the left of the item number allows you to select the item. Clicking on the **Display** button will display the selected item(s) in the desired display format. Summary is the default format.

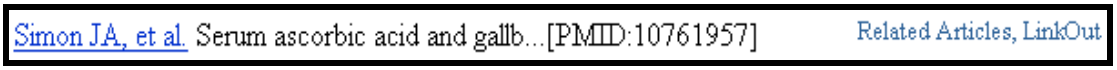
Other Display Formats

The pull-down menu next to the **Display** button allows the user to select available display formats:



Summary, Brief, Abstract, Citation, MEDLINE, Related Articles, and LinkOut are the most appropriate selections for bibliographic information.

Brief Format



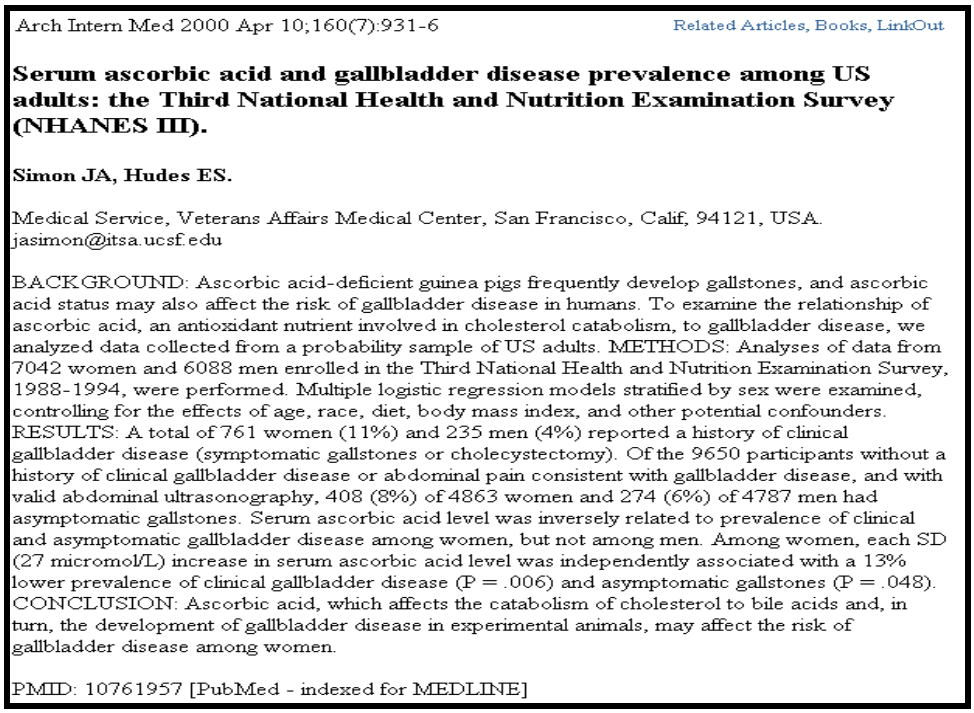
A citation displayed in the brief format includes:

- Author name
- first 30 characters of the title
- PubMed Unique Identifier (PMID)

Abstract

Provides the following information:

- Journal Source (journal title, abbreviation, date of publication, volume, issue and pagination)
- Links
- Title
- On non-English *language* articles, [Article in language] tag
- Author(s)
- Author affiliation (address) of first author at time of publication
- Abstract (if present) from published article
- Publication Types (except for Journal Article Publication Type)
- Erratum strings from Title rubrics (if applicable)
- Comments (if applicable)
- PMID
- **[PubMed - as supplied by publisher],** or [**PubMed - in process],** or **[PubMed - indexed for MEDLINE]** tag



1. Arch Intern Med 2000 Apr 10;160(7):931-6 Related Articles, Books, LinkOut
2. **Serum ascorbic acid and gallbladder disease prevalence among US adults: the Third National Health and Nutrition Examination Survey (NHANES III).**
3. **Simon JA, Hudes ES.**
4. Medical Service, Veterans Affairs Medical Center, San Francisco, Calif, 94121, USA. jasimon@itsa.ucsf.edu
5. BACKGROUND: Ascorbic acid-deficient guinea pigs frequently develop gallstones, and ascorbic acid status may also affect the risk of gallbladder disease in humans. To examine the relationship of ascorbic acid, an antioxidant nutrient involved in cholesterol catabolism, to gallbladder disease, we analyzed data collected from a probability sample of US adults. METHODS: Analyses of data from 7042 women and 6088 men enrolled in the Third National Health and Nutrition Examination Survey, 1988-1994, were performed. Multiple logistic regression models stratified by sex were examined, controlling for the effects of age, race, diet, body mass index, and other potential confounders. RESULTS: A total of 761 women (11%) and 235 men (4%) reported a history of clinical gallbladder disease (symptomatic gallstones or cholecystectomy). Of the 9650 participants without a history of clinical gallbladder disease or abdominal pain consistent with gallbladder disease, and with valid abdominal ultrasonography, 408 (8%) of 4863 women and 274 (6%) of 4787 men had asymptomatic gallstones. Serum ascorbic acid level was inversely related to prevalence of clinical and asymptomatic gallbladder disease among women, but not among men. Among women, each SD (27 micromol/L) increase in serum ascorbic acid level was independently associated with a 13% lower prevalence of clinical gallbladder disease (P = .006) and asymptomatic gallstones (P = .048). CONCLUSION: Ascorbic acid, which affects the catabolism of cholesterol to bile acids and, in turn, the development of gallbladder disease in experimental animals, may affect the risk of gallbladder disease among women.
6. PMID: 10761957 [PubMed - indexed for MEDLINE]

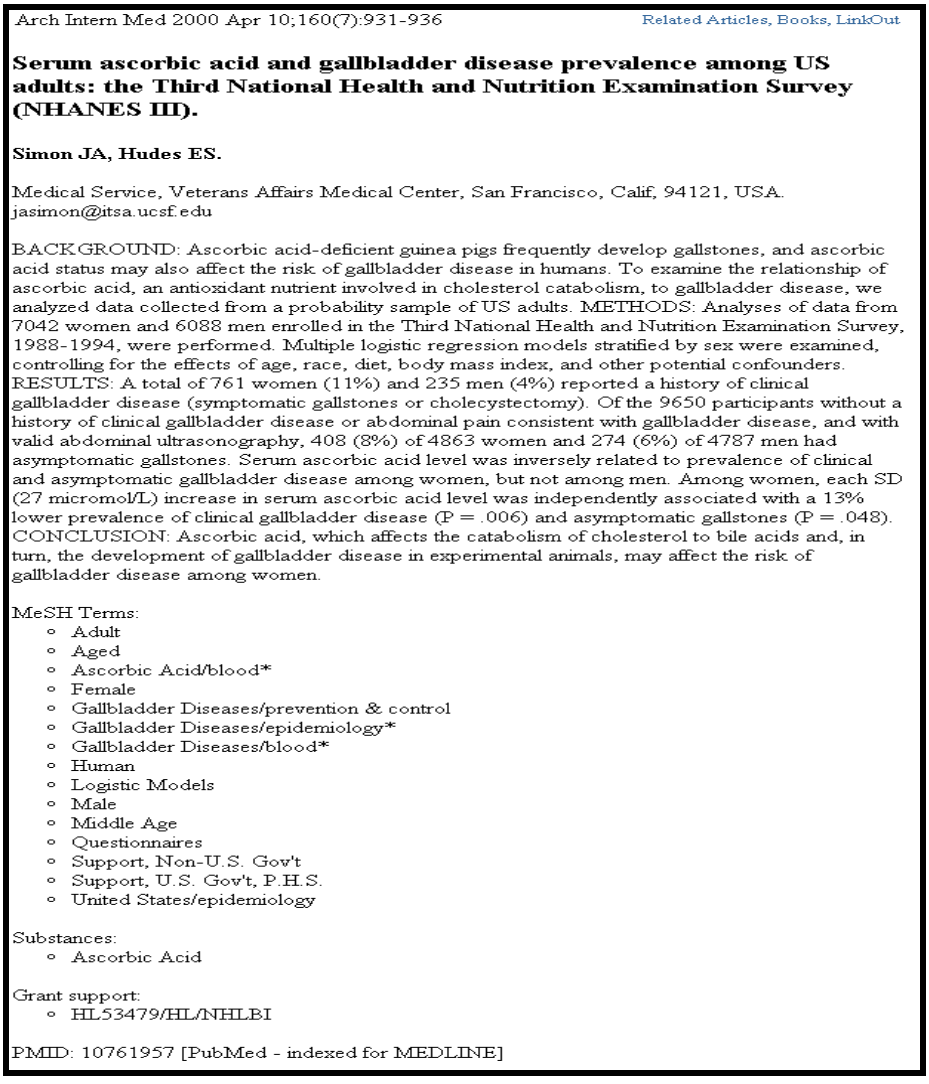
Legend:

1. Journal Source
2. Title
3. Authors
4. Author Affiliation
5. Abstract
6. PMID

Citation

Provides the following information:

- Journal Source (journal title, abbreviation, date of publication, volume, issue and pagination)
- Links
- Title
- On non-English *language* articles, [Article in language] tag
- Author(s)
- Author affiliation (address) of first author at time of publication
- Publication Types (except for Journal Article Publication Type)
- Erratum strings from Title rubrics (if applicable)
- Comments (if applicable)
- MeSH Terms
- Personal Name as Subject (if present)
- Chemical substances (if present)
- Grant numbers (if present)
- PMID
- **[PubMed - as supplied by publisher],** or [**PubMed - in process],** or **[PubMed - indexed for MEDLINE]** tag



Arch Intern Med 2000 Apr 10;160(7):931-936 Related Articles, Books, LinkOut

Serum ascorbic acid and gallbladder disease prevalence among US adults: the Third National Health and Nutrition Examination Survey (NHANES III).

Simon JA, Hudes ES.

Medical Service, Veterans Affairs Medical Center, San Francisco, Calif, 94121, USA. jasimon@itsa.ucsf.edu

BACKGROUND: Ascorbic acid-deficient guinea pigs frequently develop gallstones, and ascorbic acid status may also affect the risk of gallbladder disease in humans. To examine the relationship of ascorbic acid, an antioxidant nutrient involved in cholesterol catabolism, to gallbladder disease, we analyzed data collected from a probability sample of US adults. METHODS: Analyses of data from 7042 women and 6088 men enrolled in the Third National Health and Nutrition Examination Survey, 1988-1994, were performed. Multiple logistic regression models stratified by sex were examined, controlling for the effects of age, race, diet, body mass index, and other potential confounders. RESULTS: A total of 761 women (11%) and 235 men (4%) reported a history of clinical gallbladder disease (symptomatic gallstones or cholecystectomy). Of the 9650 participants without a history of clinical gallbladder disease or abdominal pain consistent with gallbladder disease, and with valid abdominal ultrasonography, 408 (8%) of 4863 women and 274 (6%) of 4787 men had asymptomatic gallstones. Serum ascorbic acid level was inversely related to prevalence of clinical and asymptomatic gallbladder disease among women, but not among men. Among women, each SD (27 micromol/L) increase in serum ascorbic acid level was independently associated with a 13% lower prevalence of clinical gallbladder disease (P = .006) and asymptomatic gallstones (P = .048). CONCLUSION: Ascorbic acid, which affects the catabolism of cholesterol to bile acids and, in turn, the development of gallbladder disease in experimental animals, may affect the risk of gallbladder disease among women.

MeSH Terms:
- Adult
- Aged
- Ascorbic Acid/blood*
- Female
- Gallbladder Diseases/prevention & control
- Gallbladder Diseases/epidemiology*
- Gallbladder Diseases/blood*
- Human
- Logistic Models
- Male
- Middle Age
- Questionnaires
- Support, Non-U.S. Gov't
- Support, U.S. Gov't, P.H.S.
- United States/epidemiology

Substances:
- Ascorbic Acid

Grant support:
- HL53479/HL/NHLBI

PMID: 10761957 [PubMed - indexed for MEDLINE]

MEDLINE

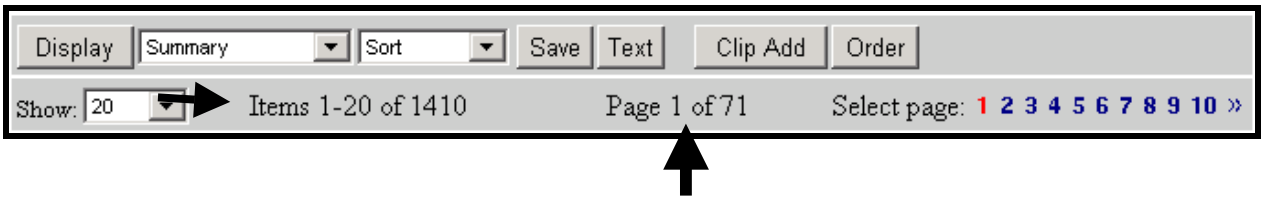
- Two character tagged field format displaying all fields of the MEDLINE record.

Simon JA, et al. Serum ascorbic acid and gallb...[PMID:10761957]

```
UI  - 20222594
PMID- 10761957
DA  - 20000421
DCOM- 20000421
LR  - 20001218
IS  - 0003-9926
VI  - 160
IP  - 7
DP  - 2000 Apr 10
TI  - Serum ascorbic acid and gallbladder disease prevalence among US adults:
      the Third National Health and Nutrition Examination Survey (NHANES III).
PG  - 931-6
AB  - BACKGROUND: Ascorbic acid-deficient guinea pigs frequently develop
      gallstones, and ascorbic acid status may also affect the risk of
      gallbladder disease in humans. To examine the relationship of ascorbic
      acid, an antioxidant nutrient involved in cholesterol catabolism, to
      gallbladder disease, we analyzed data collected from a probability sample
      of US adults. METHODS: Analyses of data from 7042 women and 6088 men
      enrolled in the Third National Health and Nutrition Examination Survey,
      1988-1994, were performed. Multiple logistic regression models stratified
      by sex were examined, controlling for the effects of age, race, diet, body
      mass index, and other potential confounders. RESULTS: A total of 761 women
      (11%) and 235 men (4%) reported a history of clinical gallbladder disease
      (symptomatic gallstones or cholecystectomy). Of the 9650 participants
      without a history of clinical gallbladder disease or abdominal pain
      consistent with gallbladder disease, and with valid abdominal
      ultrasonography, 408 (8%) of 4863 women and 274 (6%) of 4787 men had
      asymptomatic gallstones. Serum ascorbic acid level was inversely related
      to prevalence of clinical and asymptomatic gallbladder disease among
      women, but not among men. Among women, each SD (27 micromol/L) increase in
      serum ascorbic acid level was independently associated with a 13% lower
      prevalence of clinical gallbladder disease (P = .006) and asymptomatic
      gallstones (P = .048). CONCLUSION: Ascorbic acid, which affects the
      catabolism of cholesterol to bile acids and, in turn, the development of
      gallbladder disease in experimental animals, may affect the risk of
      gallbladder disease among women.
AD  - Medical Service, Veterans Affairs Medical Center, San Francisco, Calif,
      94121, USA. jasimon@itsa.ucsf.edu
AU  - Simon JA
AU  - Hudes ES
LA  - eng
ID  - HL53479/HL/NHLBI
PT  - Journal Article
CY  - UNITED STATES
TA  - Arch Intern Med
JC  - 7FS
JID - 0372440
RN  - 50-81-7 (Ascorbic Acid)
SB  - AIM
SB  - IM
MH  - Adult
MH  - Aged
MH  - Ascorbic Acid/*blood
MH  - Female
MH  - Gallbladder Diseases/*blood/*epidemiology/prevention & control
MH  - Human
MH  - Logistic Models
MH  - Male
MH  - Middle Age
MH  - Questionnaires
MH  - Support, Non-U.S. Gov't
MH  - Support, U.S. Gov't, P.H.S.
MH  - United States/epidemiology
EDAT- 2000/04/13 09:00
MHDA- 2000/04/29 09:00
PST - ppublish
SO  - Arch Intern Med 2000 Apr 10;160(7):931-6.
```

Use this format for downloading records into bibliographic management software programs.

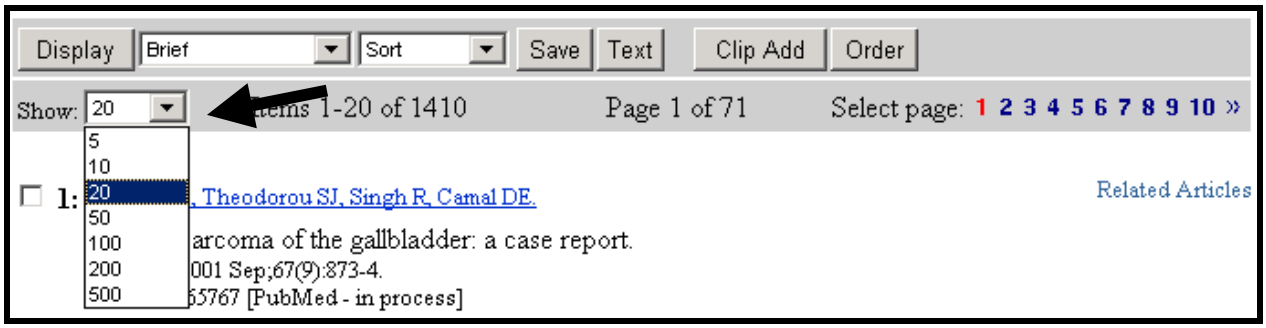
Retrieval Summary



- The retrieval summary line displays the total number of citations retrieved by the current search, and how many pages of citations there are given the selected number of citations per page (default = 20 citations/page).

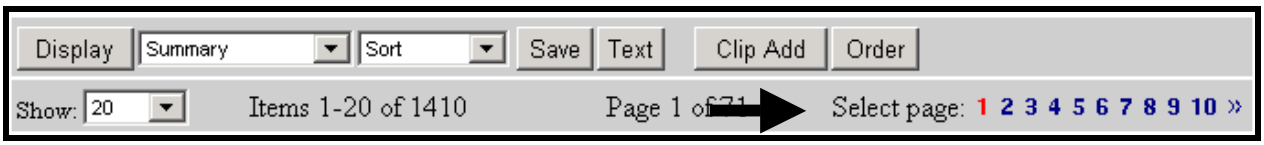
Show pull-down menu

- PubMed displays search results in batches of 20 citations per page.



- Click on the Show pull-down menu to select a higher/lower number and then click Display.
- PubMed redisplays the citations based on your selection.

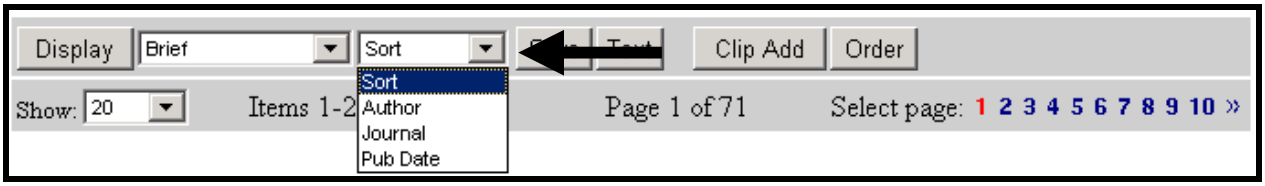
Select Page



- The Results screen has links to the other pages containing the rest of the search results. Click on the next page of results you wish to display.
- The page number for the page currently displayed is in red.
- Click on the >> symbol to see page numbers greater than the ones displayed
- Click on the << symbol to see page numbers less than the ones displayed.

Sort

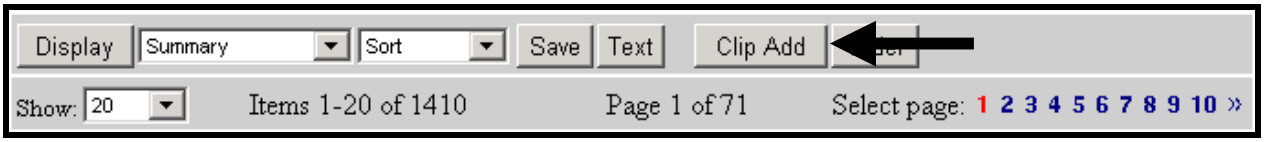
- To sort items by author, journal, or publication date, click on the Sort pull-down menu select a sort field, then click display.



You can sort directly from the results screen, or you can collect citations on the clipboard and sort the items there.

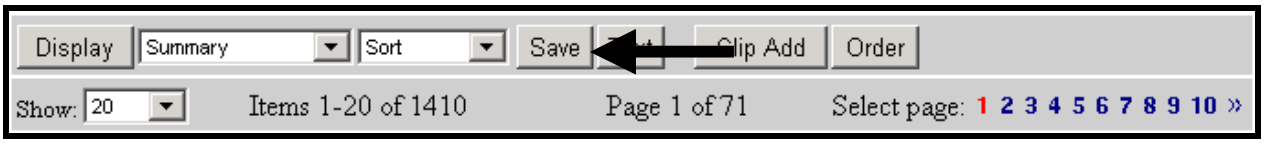
- Author and Journal sort alphabetically A to Z, the secondary sort is Publication Date.
- Publication Date (i.e., Pub Date) sorts by publication date, displaying the latest publication dates first. The secondary sort is Journal title.

Clip Add



- The Clipboard allows you save or view selected citations from one search or several searches that you may want to print, save, or order.
- The maximum number of items that can be placed in the Clipboard is **500**.
- The Clipboard will be **lost after one hour of inactivity** on PubMed or any of the other Entrez databases.
- To place an item in the Clipboard, click on the box to the left of the citation and then click on the **Clip Add** button.
- Once you have added a citation to the Clipboard, the item number color will change.

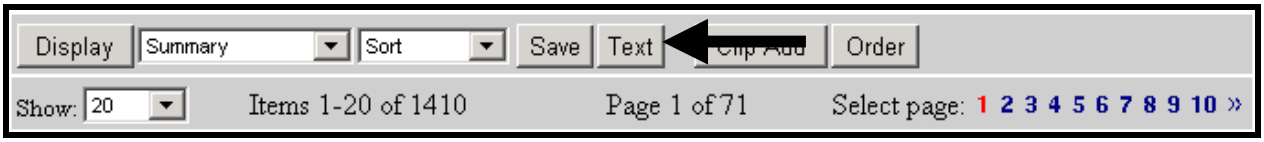
Save



- To **save your entire set of search results**, use the Display pull-down menu to select the desired format, click **Save**. This option saves the entire set of search results in the display format selected.
- To mark **selected citations to save**, click on the check-box to the left of the item number as you go through each page of your retrieval. After you select the citations and choose a display format, click the **Save** button.

The maximum number of items that can be saved is **10,000**. If you try to save a file with more than 10,000 citations, PubMed will display an error message that instructs you to refine your search.

Text

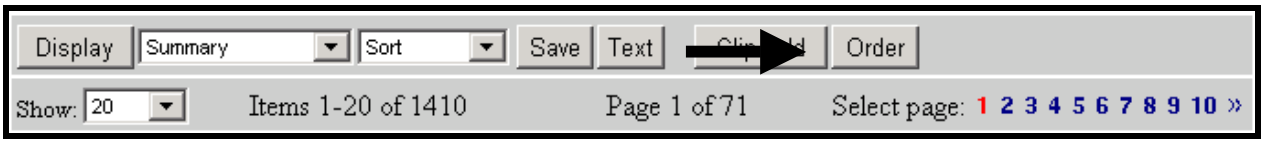


- Use Text to redisplay citations using just the text of records and omitting the Web or HTML components. When finished with the text display, use your Web browser's Back button to your results in HTML.
- Use this feature when printing so you do not print PubMed's sidebar and buttons unnecessarily.
- The text version will display either selected citations, or if no citations are selected, all the citations on the page.
- Before using the Text button, consider using the Show pull-down menu to increase the number of items displayed on each page.

Printing

- Use the Print function of your Web browser**,** which will print all the information and citations displayed on your Web page.
- Consider using the **Text** button described above.
- Think about using the Show pull-down menu to display all of your citations on one Web page. You can only print the citations from the displayed page.

Order



- Click **Order** to use an automated document ordering program called **Loansome Doc**.
- You can also **Order** directly from the Clipboard.

You can order directly from the results screen, or you can collect citations on the clipboard and order from there.

The **Order Documents** feature allows you to use an automated document ordering program called **Loansome Doc**.

What is Loansome Doc?

The Loansome Doc feature allows you to electronically order the full-text of a citation from a Loansome Doc participating library in your area. Prior to using this feature, you need to establish an agreement with a Loansome Doc participating library. Your Loansome Doc library will provide you with their **Library ID**, which is needed when setting up the service within PubMed or NLM Gateway.

What does it cost?

The library providing you this service will explain their ordering fees. This service is generally ***not*** free.

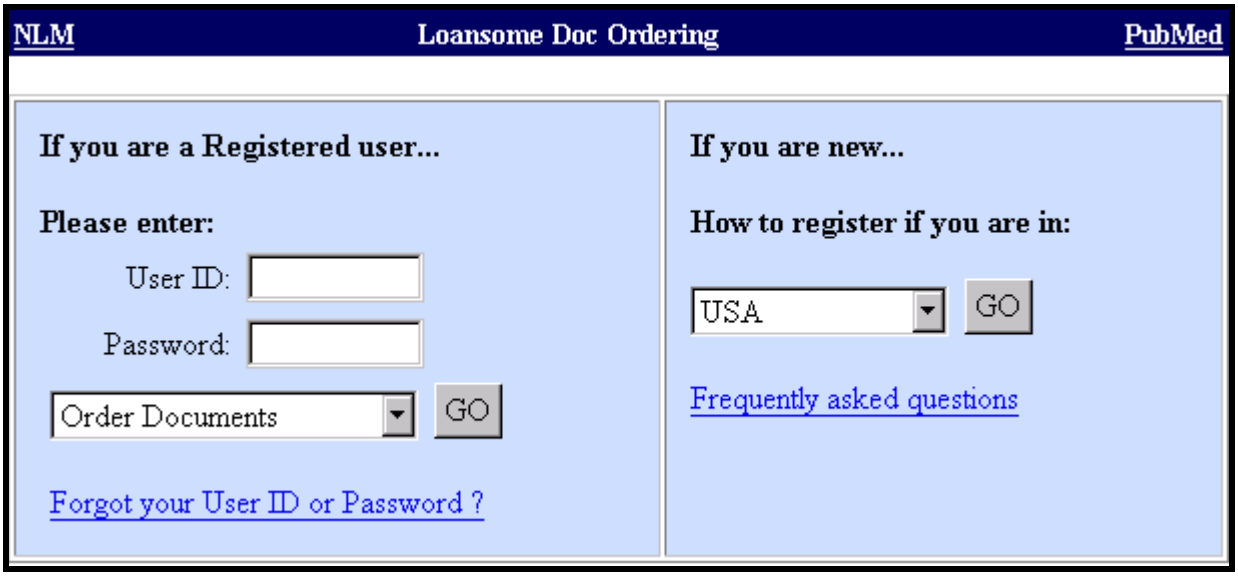
What library can provide me with this kind of service?

Call your Regional Medical Library at **1-800-338-7657** Monday-Friday, 8:30 A.M. – 5:00 P.M. in all time zones to find out which medical library in your area can provide you with Loansome Doc ordering service. Or visit http://www.nnlm.nlm.nih.gov/members/ to find a library that can help you.

To order specific citations, select them by clicking on the check-box to the left of each item.

- Click on the **Order** button.

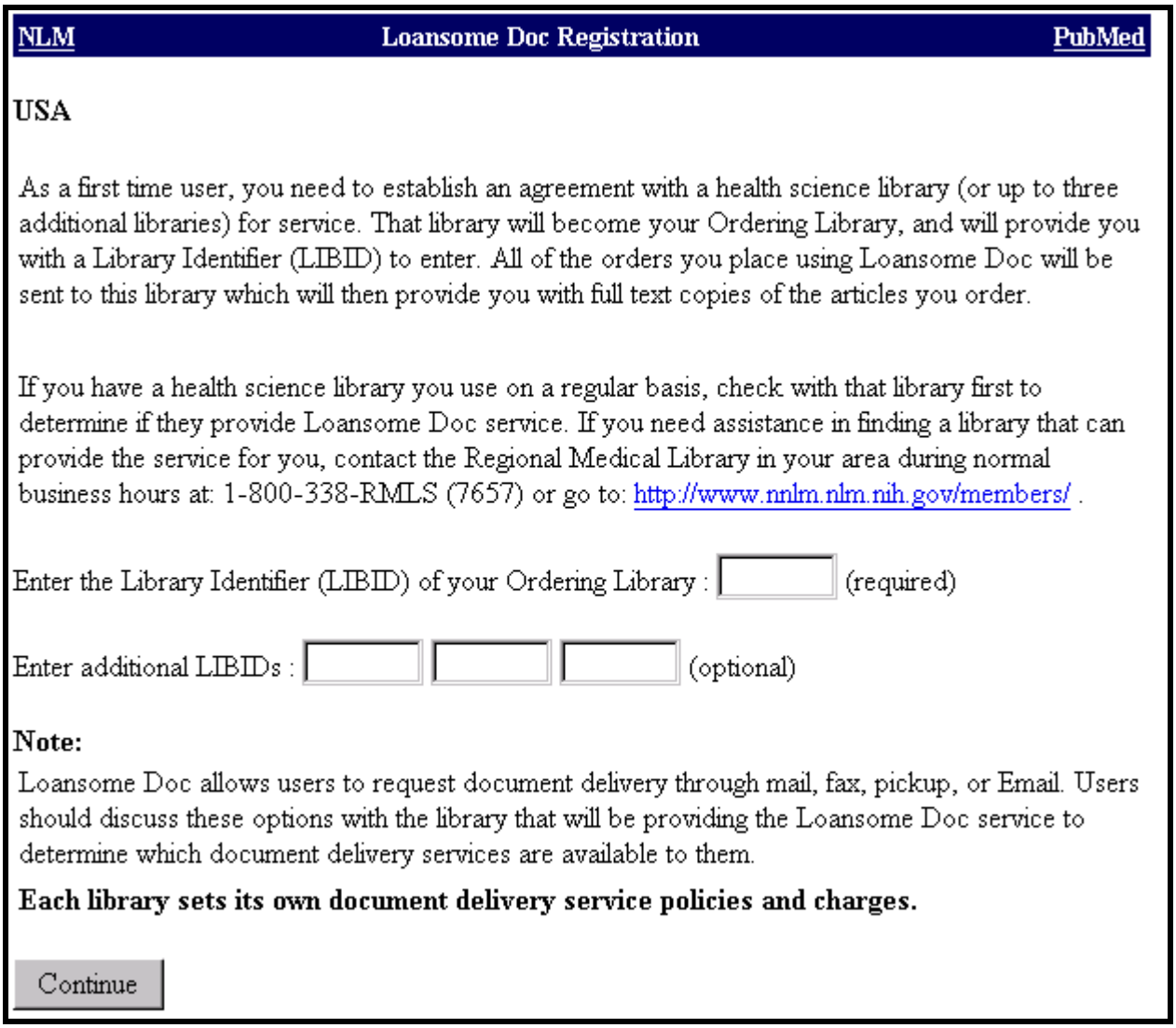
Once you click on the **Order** button, you are brought to the page shown below.



On this page you can:

- log into the Loansome Doc Ordering Server
- obtain a status report of your orders
- modify information on your Loansome Doc ID record
- learn about registering for a Loansome Doc code/password

- If you are new to Loansome Do, click on the **GO** button to learn about registering. The Loansome Doc Registration page (shown below) provides important information about the service.



NLM Loansome Doc Registration PubMed

USA

As a first time user, you need to establish an agreement with a health science library (or up to three additional libraries) for service. That library will become your Ordering Library, and will provide you with a Library Identifier (LIBID) to enter. All of the orders you place using Loansome Doc will be sent to this library which will then provide you with full text copies of the articles you order.

If you have a health science library you use on a regular basis, check with that library first to determine if they provide Loansome Doc service. If you need assistance in finding a library that can provide the service for you, contact the Regional Medical Library in your area during normal business hours at: 1-800-338-RMLS (7657) or go to: http://www.nnlm.nlm.nih.gov/members/ .

Enter the Library Identifier (LIBID) of your Ordering Library : (required)

Enter additional LIBIDs : (optional)

Note:

Loansome Doc allows users to request document delivery through mail, fax, pickup, or Email. Users should discuss these options with the library that will be providing the Loansome Doc service to determine which document delivery services are available to them.

Each library sets its own document delivery service policies and charges.

Continue

- Enter the Library Identifier (LIBID) of your Ordering Library and click on the **Continue** button at the bottom of the screen to continue the registration process.

NLM **Loansome Doc Registration** PubMed

IDENTIFICATION INFORMATION

First Name :	Polly
Last Name :	Smith (required)
Title :	Librarian (e.g. MD, Ph.D, RN etc.)

ADDRESS INFORMATION

Address 1 :	Acme Library (required)
Address 2 :	12 Acme Blvd.
City :	Bethesda (required)
State/Province :	Maryland (U.S. and Canada Only)
State/Province :	(International Only)
Country :	USA (required)
Zip/Postal Code :	20894 (required)
Phone country code :	1 (required) Country Codes
Phone area code :	301 (required)
Phone local number :	555-1212 (required)
Phone Extension :	1234

Delivery Information

Method :	Mail
Fax country code :	
Fax area code :	
Fax local number:	
Fax Extension :	
Email :	
IP address :	

Print comment entered below on all orders.

Comment : Account Number 123456

Authorize ordering library to obtain articles from other libraries if ordering library is unable to fill the request.

Authorize : ○ No ◉ Yes

LOGIN INFORMATION

Enter a User ID and Password of your choice to use for all future orders.

User ID :	abc123 (required)
Password :	****** (required)
Retype Password :	****** (required)

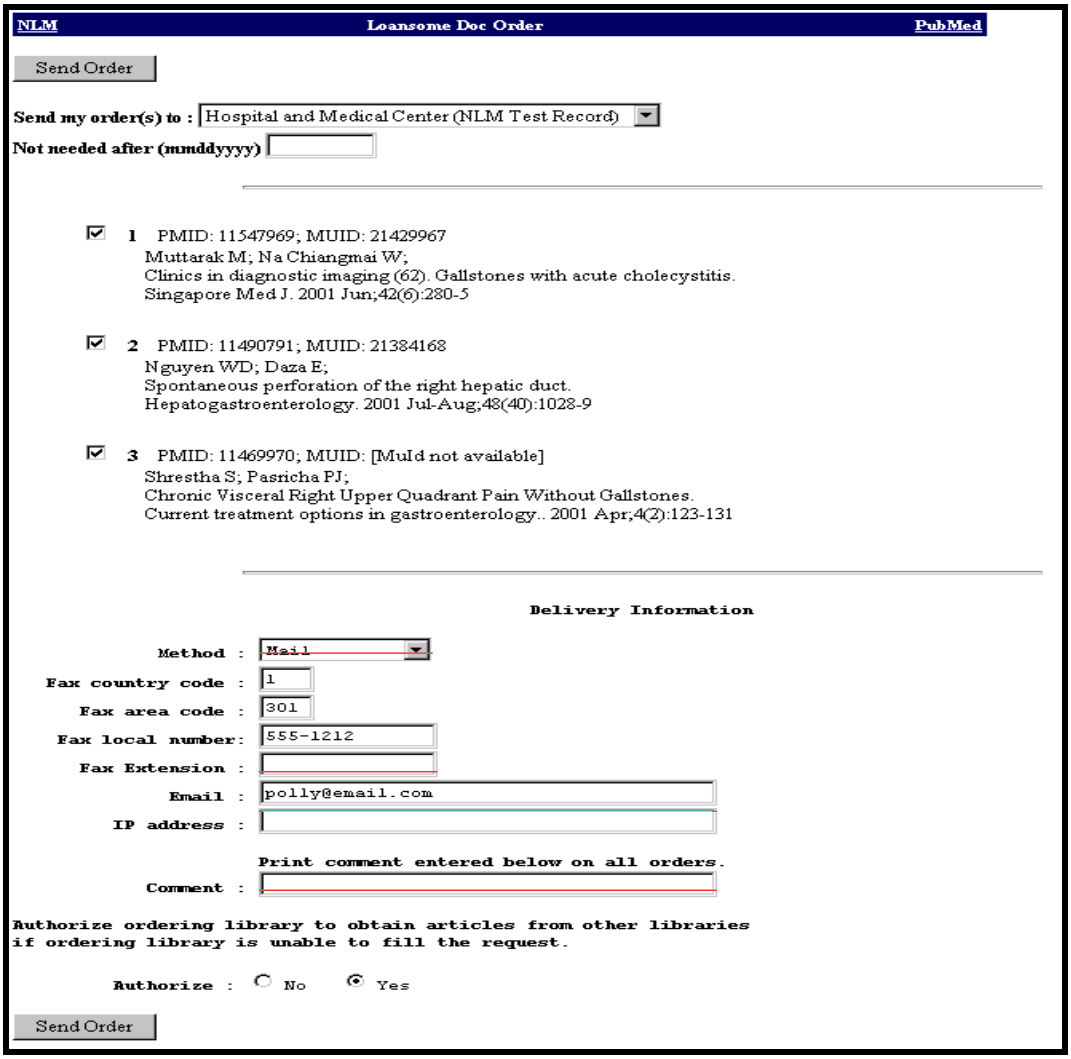
Register

- Next, you receive a screen explaining copyright compliance. Click on the **Accept** button.

- Loansome Doc now brings you to a screen confirming the citations you are ordering and your user information. Click on the **Send Order** button after reviewing the information.

The articles you selected to order.

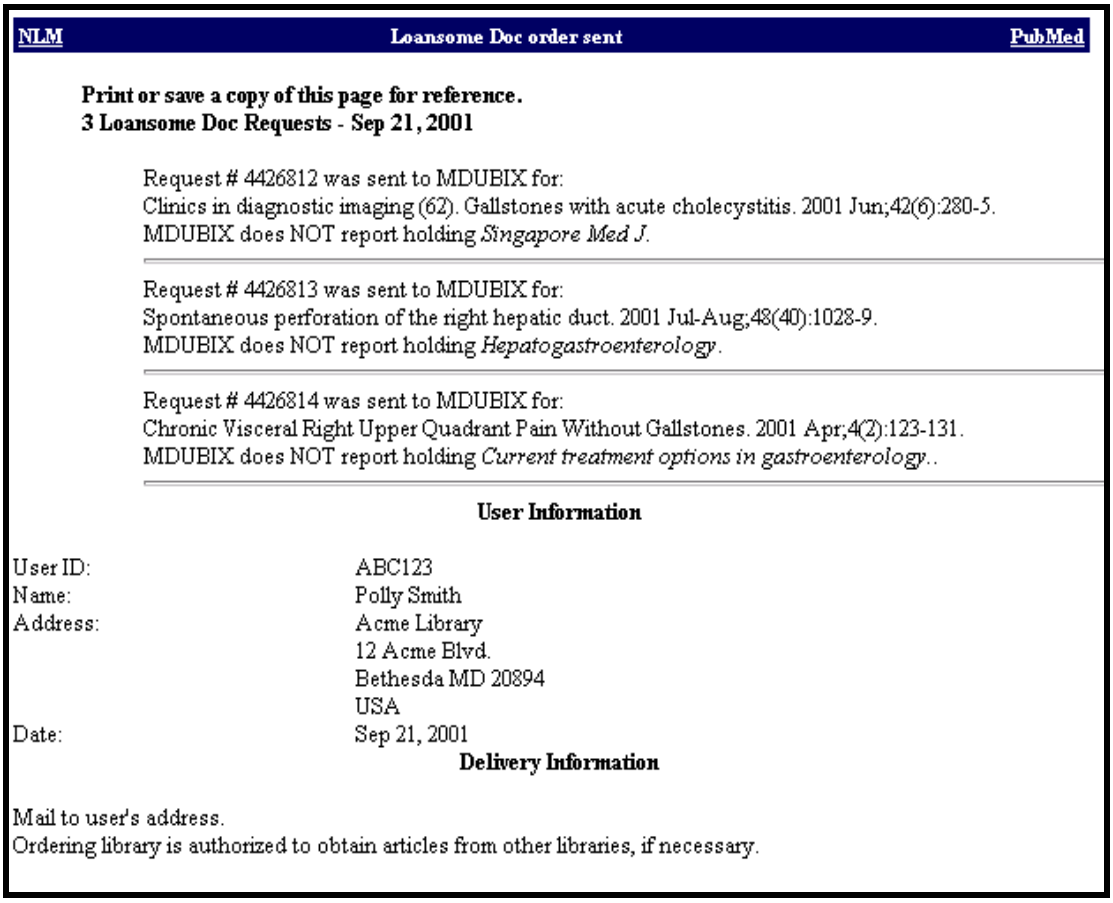
Send Order *button*



- Next you are brought to the Loansome Doc confirmation screen, which confirms that your order was sent to the ordering library.

"Request Sent" message

User-supplied information



NLM **Loansome Doc order sent** PubMed

Print or save a copy of this page for reference.
3 Loansome Doc Requests - Sep 21, 2001

Request # 4426812 was sent to MDUBIX for:
Clinics in diagnostic imaging (62). Gallstones with acute cholecystitis. 2001 Jun;42(6):280-5.
MDUBIX does NOT report holding *Singapore Med J.*

Request # 4426813 was sent to MDUBIX for:
Spontaneous perforation of the right hepatic duct. 2001 Jul-Aug;48(40):1028-9.
MDUBIX does NOT report holding *Hepatogastroenterology*.

Request # 4426814 was sent to MDUBIX for:
Chronic Visceral Right Upper Quadrant Pain Without Gallstones. 2001 Apr;4(2):123-131.
MDUBIX does NOT report holding *Current treatment options in gastroenterology*..

User Information

User ID:	ABC123
Name:	Polly Smith
Address:	Acme Library 12 Acme Blvd. Bethesda MD 20894 USA
Date:	Sep 21, 2001

Delivery Information

Mail to user's address.
Ordering library is authorized to obtain articles from other libraries, if necessary.

Practice Exercises

1. Find references about shingles and facial paralysis. Display the records in the format that shows the abstract and the MeSH headings. How does PubMed map the term, shingles?

2. Find references about hypertension and a nosebleed. How does PubMed map the term, nosebleed? Display all of the retrieved records on one Web page.

3. Find references about genetically modified food. Display the retrieved records in the format where you display the abstract but not the MeSH headings.

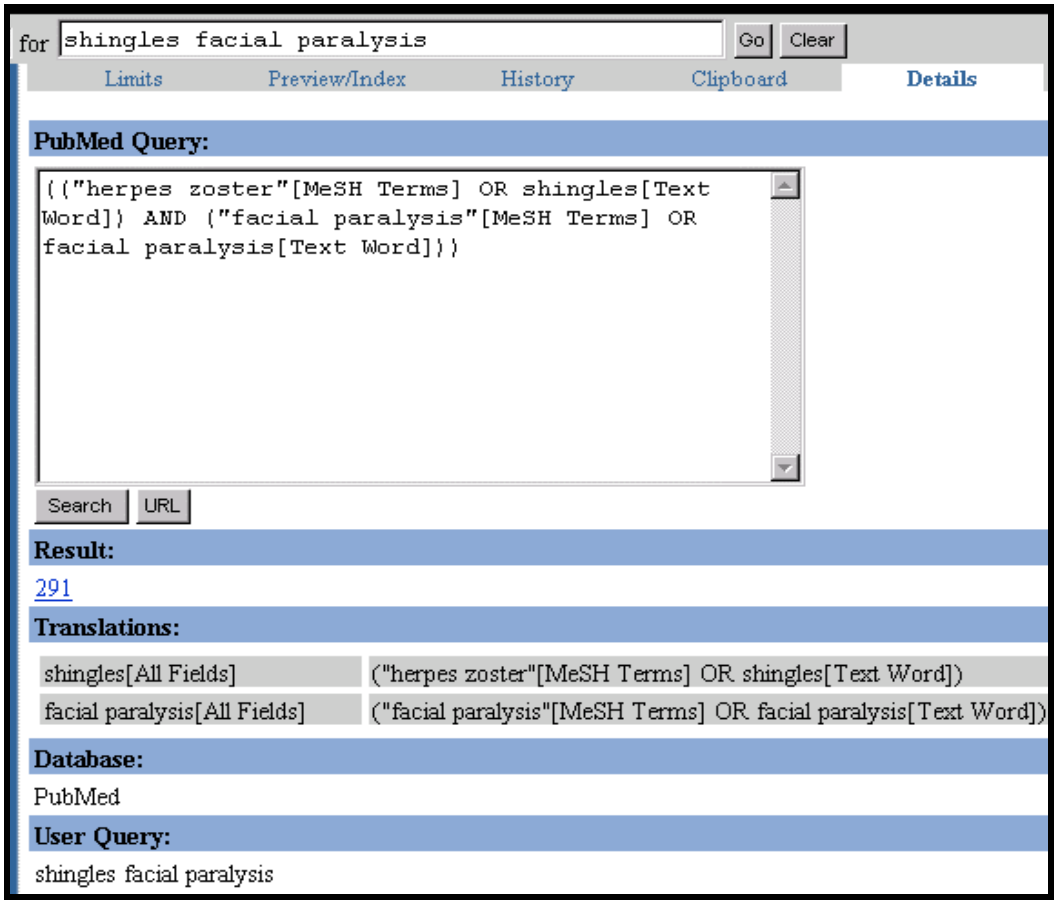
4. Are there articles by George Barrera-Hernandez referenced in MEDLINE?

5. Please find information about wisdom tooth pain. Using the Details screen, determine to what MeSH Heading wisdom tooth maps.

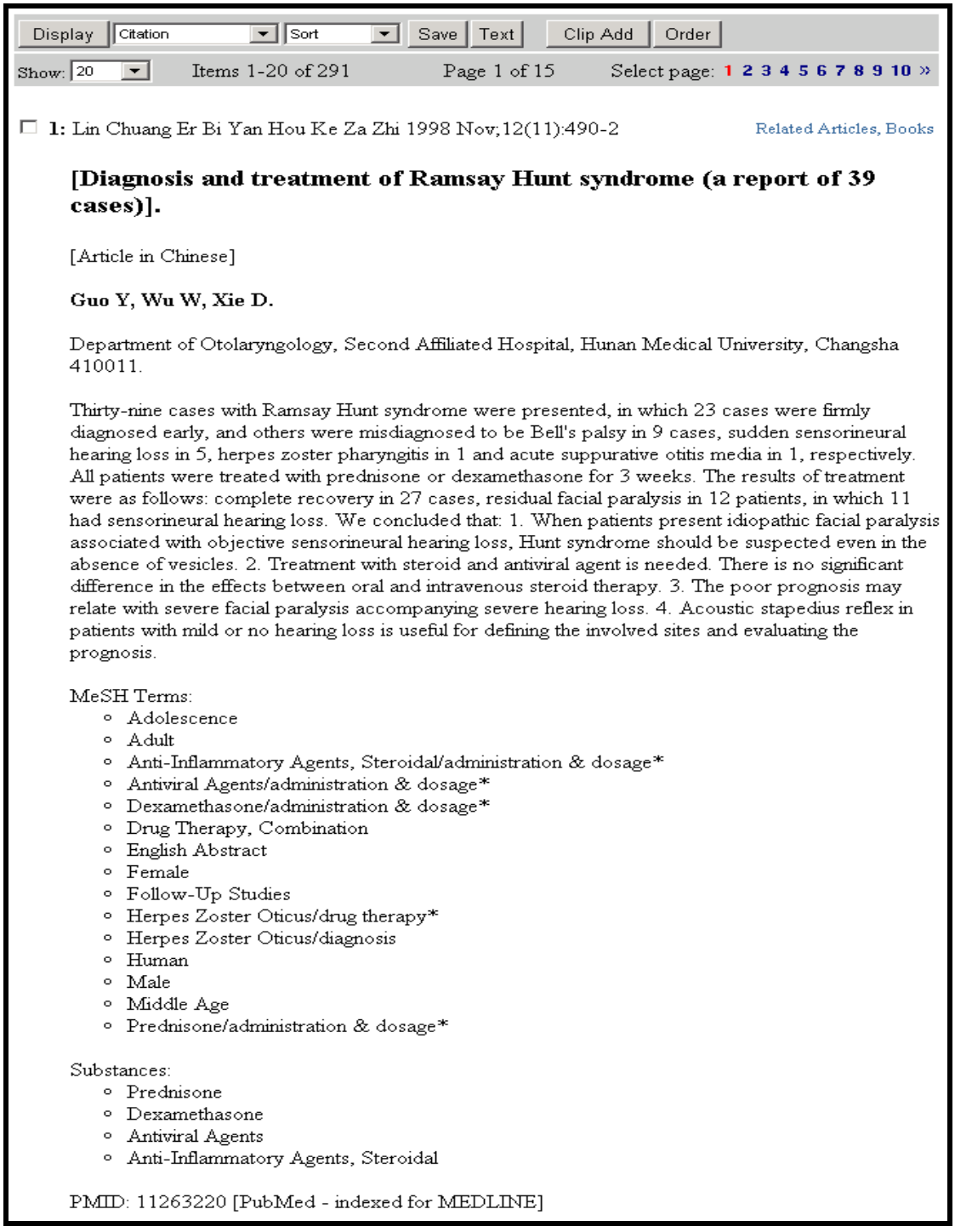
Suggested Answers

1. Find references about shingles and facial paralysis. Display the records in the format that shows the abstract and the MeSH headings. How does PubMed map the term, shingles?

Enter shingles facial paralysis in the query box, click **Go**. Click on **Details** to see that the term shingles maps to the MeSH heading **Herpes Zoster**.



Use the **Citation** display format to display both the abstract and MeSH headings.



Display Citation Sort Save Text Clip Add Order

Show: 20 Items 1-20 of 291 Page 1 of 15 Select page: 1 2 3 4 5 6 7 8 9 10 »

1: Lin Chuang Er Bi Yan Hou Ke Za Zhi 1998 Nov;12(11):490-2 Related Articles, Books

[Diagnosis and treatment of Ramsay Hunt syndrome (a report of 39 cases)].

[Article in Chinese]

Guo Y, Wu W, Xie D.

Department of Otolaryngology, Second Affiliated Hospital, Hunan Medical University, Changsha 410011.

Thirty-nine cases with Ramsay Hunt syndrome were presented, in which 23 cases were firmly diagnosed early, and others were misdiagnosed to be Bell's palsy in 9 cases, sudden sensorineural hearing loss in 5, herpes zoster pharyngitis in 1 and acute suppurative otitis media in 1, respectively. All patients were treated with prednisone or dexamethasone for 3 weeks. The results of treatment were as follows: complete recovery in 27 cases, residual facial paralysis in 12 patients, in which 11 had sensorineural hearing loss. We concluded that: 1. When patients present idiopathic facial paralysis associated with objective sensorineural hearing loss, Hunt syndrome should be suspected even in the absence of vesicles. 2. Treatment with steroid and antiviral agent is needed. There is no significant difference in the effects between oral and intravenous steroid therapy. 3. The poor prognosis may relate with severe facial paralysis accompanying severe hearing loss. 4. Acoustic stapedius reflex in patients with mild or no hearing loss is useful for defining the involved sites and evaluating the prognosis.

MeSH Terms:

- Adolescence
- Adult
- Anti-Inflammatory Agents, Steroidal/administration & dosage*
- Antiviral Agents/administration & dosage*
- Dexamethasone/administration & dosage*
- Drug Therapy, Combination
- English Abstract
- Female
- Follow-Up Studies
- Herpes Zoster Oticus/drug therapy*
- Herpes Zoster Oticus/diagnosis
- Human
- Male
- Middle Age
- Prednisone/administration & dosage*

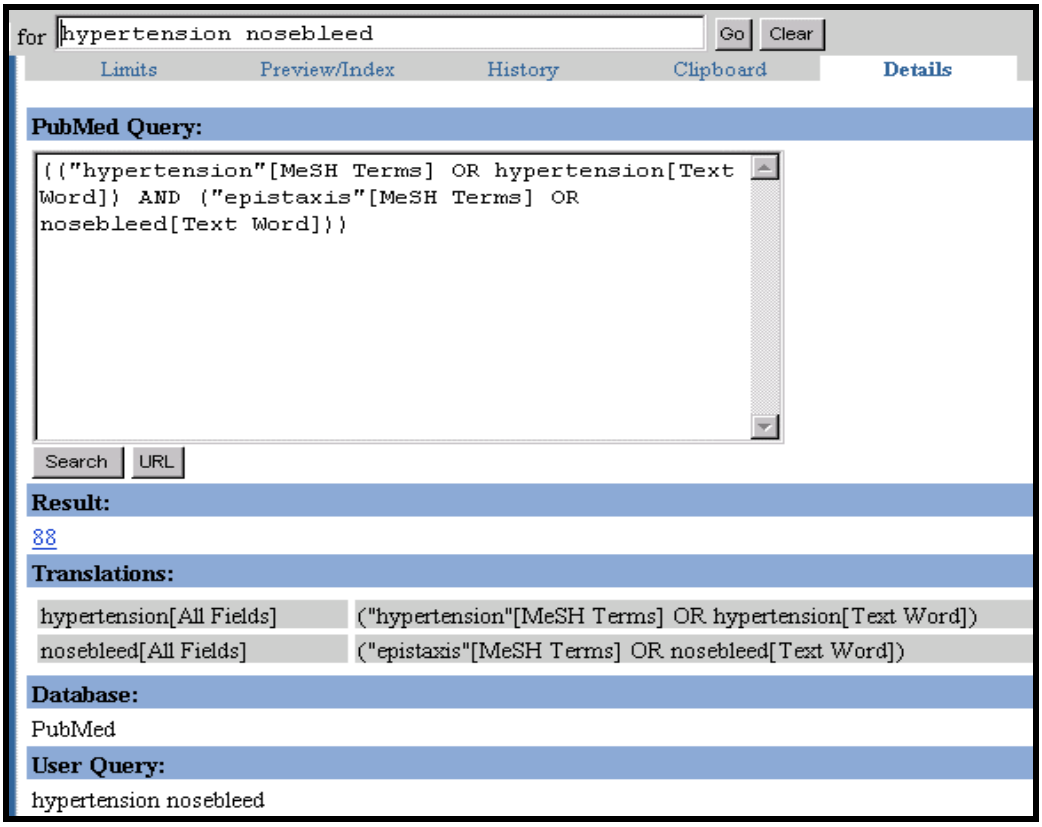
Substances:

- Prednisone
- Dexamethasone
- Antiviral Agents
- Anti-Inflammatory Agents, Steroidal

PMID: 11263220 [PubMed - indexed for MEDLINE]

2. Find references about hypertension and a nosebleed. How does PubMed map the term, nosebleed? Display all of the retrieved records on one Web page.

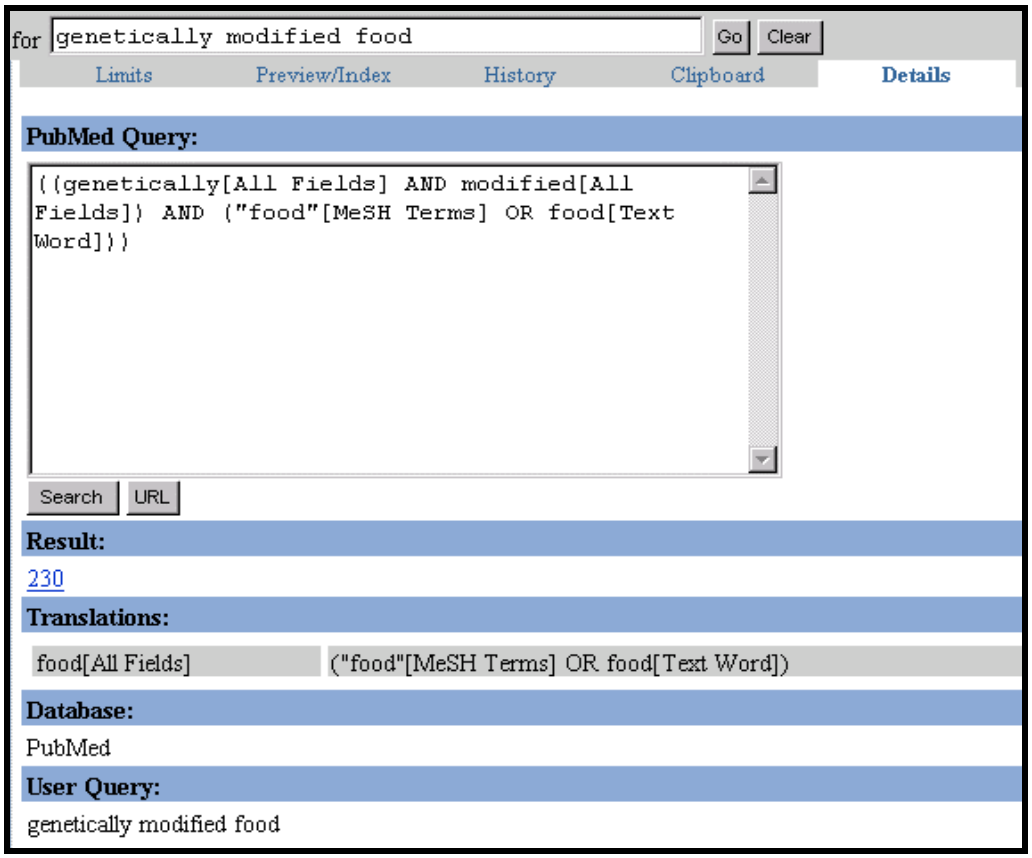
Details:



The term, nosebleed, maps to the MeSH heading, **epistaxis**. From the **Show pull-down** menu, choose a number higher than your final retrieval set in order to display all the records on one Web page. Click the **Display** button.

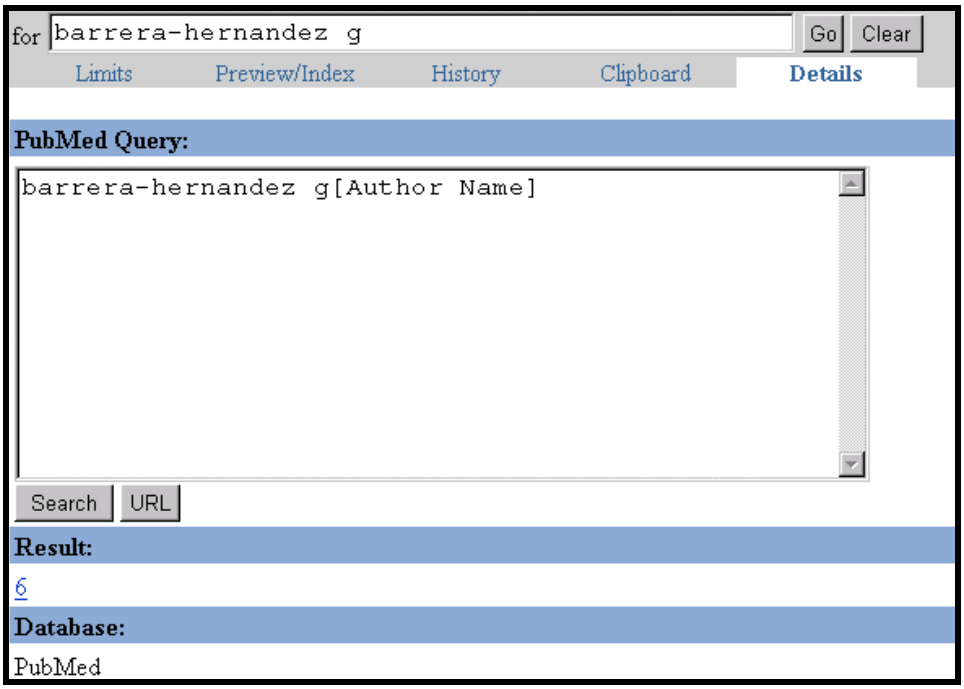
3. Find references about genetically modified food. Display the retrieved records in the format where you display the abstract but not the MeSH Headings.

Details:



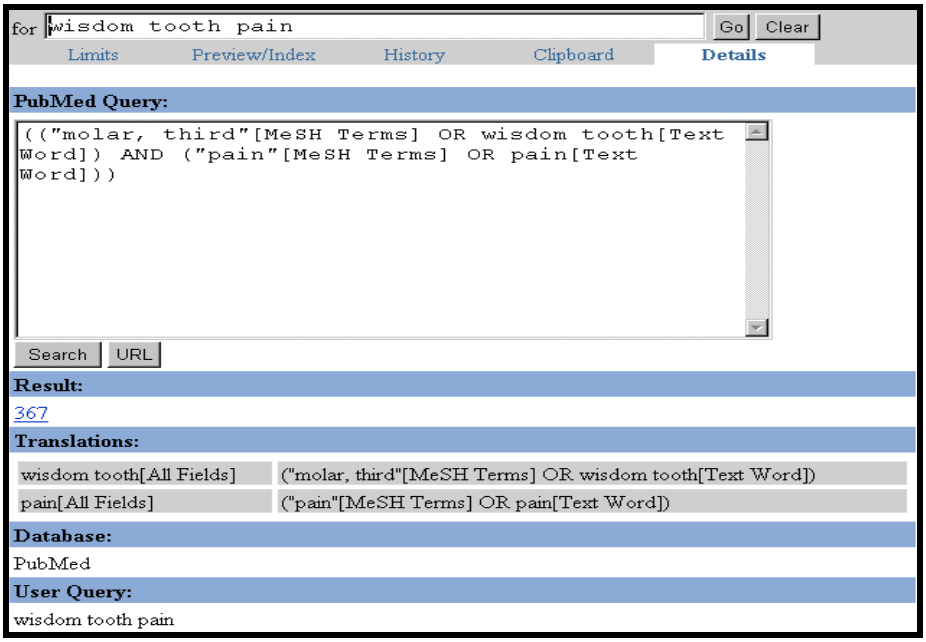
Use the **Abstract** display format to display the records with abstracts (if present) but not MeSH headings.

4. Are there articles by George Barrera-Hernandez referenced in MEDLINE?



5. Please find information about wisdom tooth pain. Using the Details screen, determine to what MeSH Heading wisdom tooth maps.

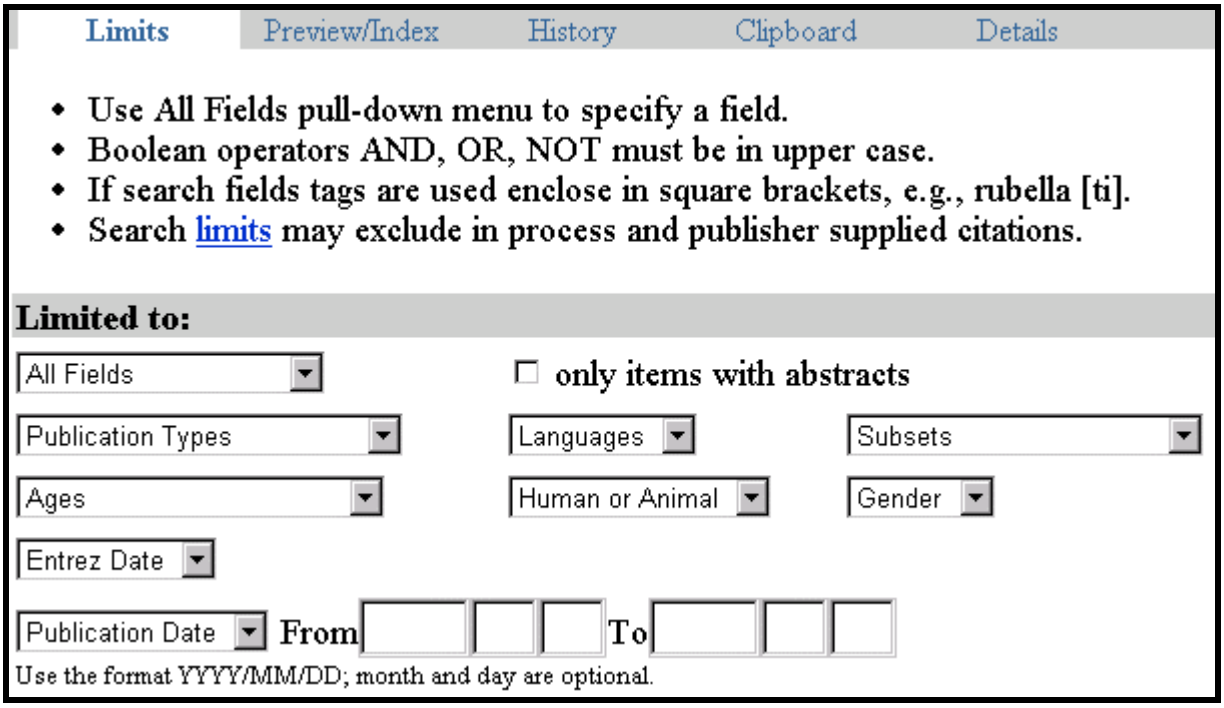
Molar, Third *is the MeSH term to which wisdom tooth maps*



Features Bar

The Features Bar allows you to select several additional functions.

Limits



Click on **Limits** on the Features Bar to bring up the Limits page.

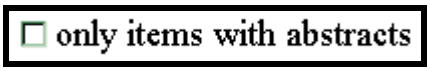
Limits:

- Allows you to limit your search terms to a specific search field.
- Allows you to limit your search to a specific age group, gender, or human or animal studies.
- Also allows you to restrict to articles published in specific languages or to specific types of articles such as review articles.
- You may choose to limit to only citations containing abstracts.
- You can also limit by either Entrez Date or Publication Date.
- You may limit to a specific subset of citations within PubMed, such as from AIDS-related citations.

Field Selection

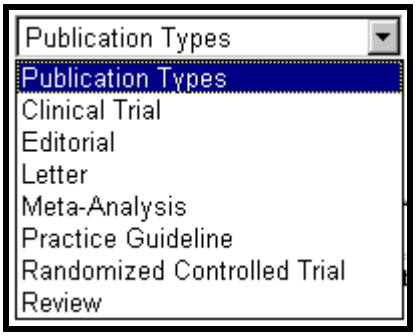
- You may limit your search terms to a specific search field.
- To select a specific field, click the All Fields pull-down menu and select a search field. Enter multiple terms separated by Boolean operators.
- Example: Select MeSH Terms from the pull-down, enter bed rest AND pain in the query box, click **Go**.

Only items with abstracts



- Click in this box to limit your retrieval to only citations having an abstract present on the record.

Publication Types



- You may limit your retrieval based on the type of material the article represents.
- The Publications Types pull-down menu contains a list of frequently searched publication types.

Languages

- Journals from approximately forty languages are indexed.
- The Languages pull-down menu contains a list of frequently searched languages.

Ages

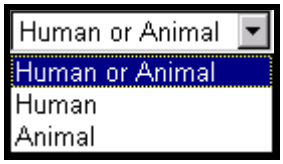
- To select a specific age group for human studies, click on the Ages pull-down menu.

Gender

- To select a specific gender, click on the Gender pull-down menu.

Human or Animal

- To select a specific study group, click on the Human or Animal pull-down menu.



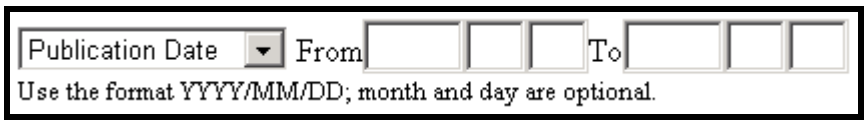
Dates

- PubMed contains citations published back to 1966.
- New citations are added Tuesday-Saturday.
- You may restrict to two date fields from the Limits screen:
  - Entrez Date: the date the citation was initially added to PubMed
  - Publication Date: the date the article was published
- When PubMed displays your search results, the citations are displayed in Entrez Date order – last in, first out.

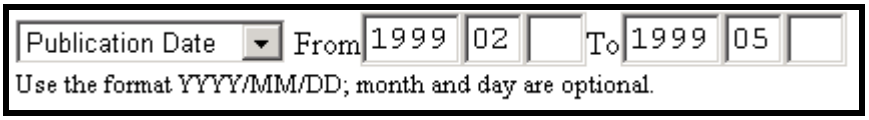
Limiting by Dates

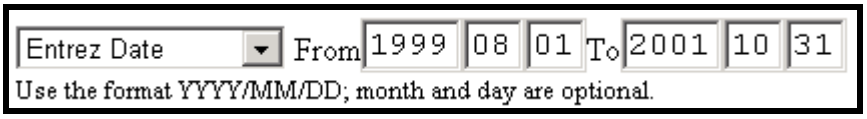
- Use the Entrez Date pull-down menu to limit your search back in time from 30 days to 10 years.

- The publication date pull-down menu toggles between Publication Date and Entrez Date.
- Use the From: and To: boxes to specify a range of dates.
- Enter the dates in the format of YYYY/MM/DD (month and day are optional).

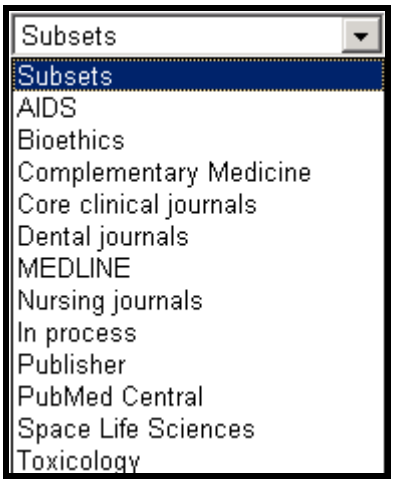


Examples:





Subsets



Allows you to limit your retrieval to one of the four types of groupings of records:

1. Levels of processing:
   - Publisher: [PubMed – as supplied by publisher] citations
   - In Process: [PubMed – in process] citations
   - MEDLINE: [PubMed – indexed for MEDLINE] citations

2. Subject Filters:
   - AIDS
   - Bioethics
   - Complementary Medicine
   - Space Life Sciences
   - Toxicology

3. Journal groupings:
   - Core clinical journals: 120 English-language journals from the formerly published *Abridged Index Medicus*
   - Dental
   - Nursing

4. Other:
   - PubMed Central

Limits Indicator

- Once you have selected Limits, a check box appears next to the Limits on the Features Bar.
- If you run a search, the limits in effect will appear in the yellow bar above the Display button:

Limits: Child: 6-12 years, English

To **turn off all of the limits** before you run your next search, click on the check box next to Limits on the Features Bar to remove the check and turn off the limits.

Preview/Index

This page is home to two functions: Preview and Index.

Use Preview/Index to:

- Preview the number of search results before displaying the citations.
- Refine search strategies by adding one or more terms, one at a time.
- Add terms to a strategy from specific search fields.
- View and select terms from the Index to develop search strategies.
- View your search strategy as you continue to refine your search.

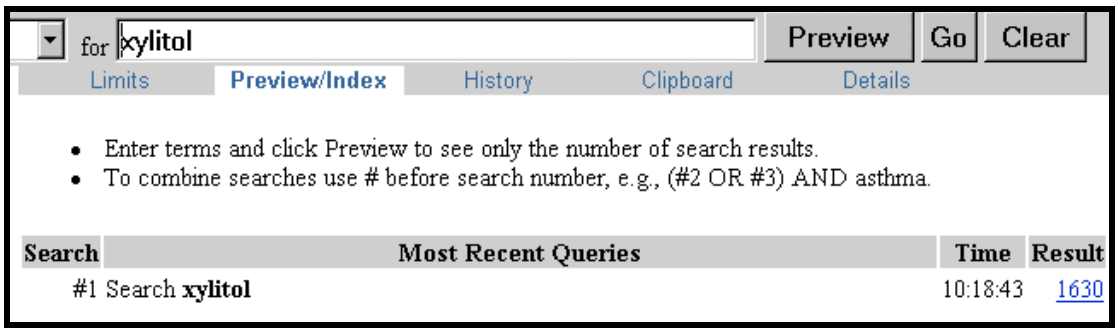
Preview

Previewing the number of search results before displaying the citations

Search Request: *Find citations on how xylitol prevents tooth decay in children. Xylitol is a sugar substitute used in sugar-free gum, etc.*

- Enter terms in the query box and click Preview.

- PubMed returns the number of citations but not the actual results.



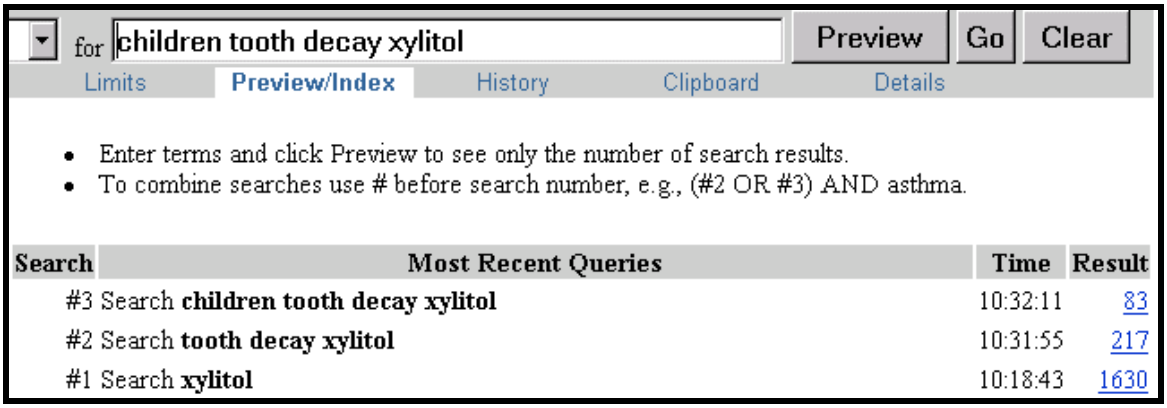
***Result** shows the number of citations.*

Refining search strategies by adding one or more terms at a time

- Add another term (e.g., tooth decay) to the query box and click **Preview**.

- Continue adding terms (e.g., children) and clicking **Preview** until your strategy is complete.
- View your search strategy and number of results as you continue to refine your search.

__Preview__ shows search strategy and number of results as each term is added.



Preview displays the last three queries from History. Use History to review up to the last 100 queries. The Clear History button in History also clears the history information from the Preview/Index.

History will be lost after one hour of inactivity on PubMed.

Index

Viewing and selecting terms from the Index to develop search strategies

- Use the Index button to view and select terms from the Index of a specific field and to add them to your search strategy.
- The Index allows you to view a listing of terms within a search field.
- You may also select terms to build a search strategy using Boolean operators.

Selecting a field and entering a term to look up in the Index

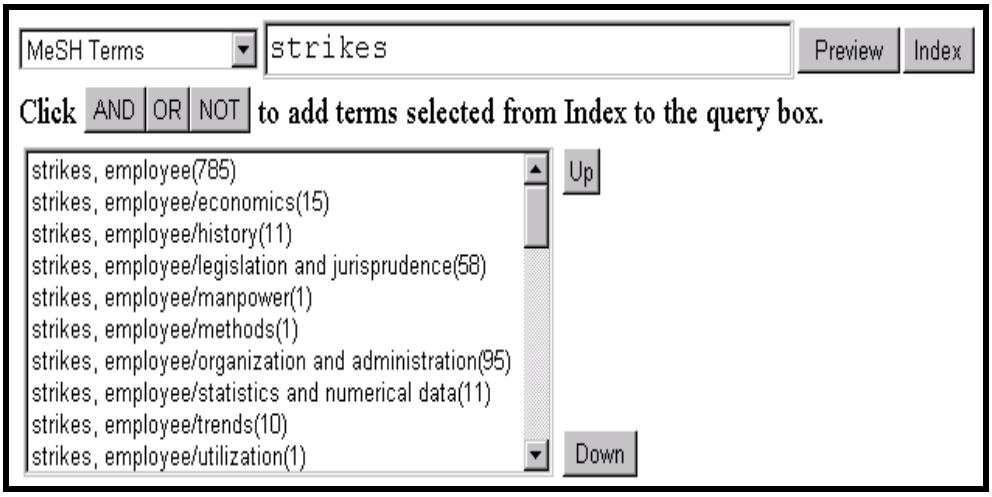
Search Request: *Find citations on employees strikes.*

Let's select **MeSH Terms** from the pull-down menu, type in the term, **strikes** and click on the **Index** button.

*PubMed displays a portion of the alphabetical list of available terms for the selected search field. Scroll up and down this window using the **scroll bar**.*

The number of citations that contain the term appears in parentheses to the right of the term.

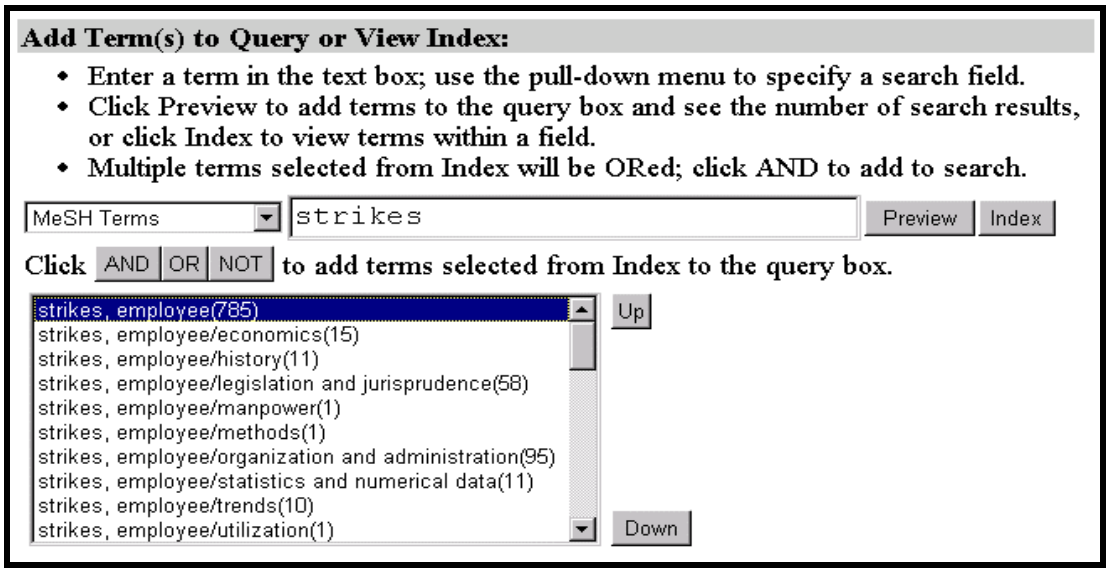
*To scroll up or down the entire Index for the field, click the **Up** or **Down** buttons.*



Strikes is an entry term for the preferred MeSH heading, Strikes, Employee.

Selecting a term from the Index

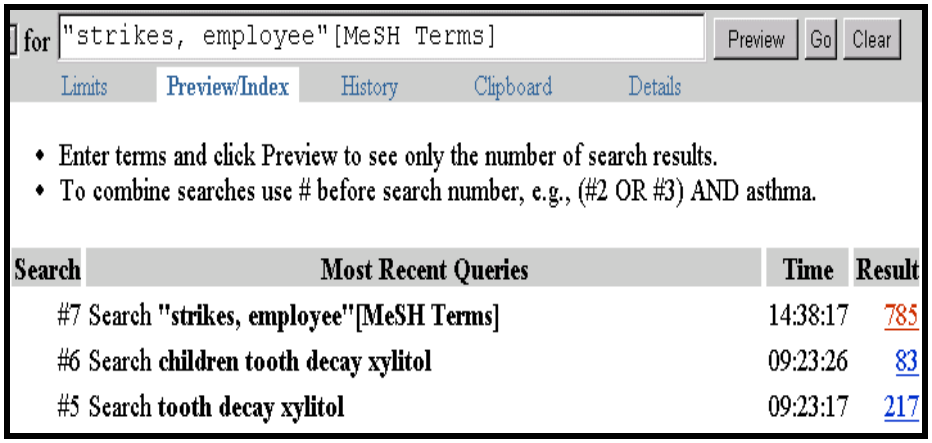
- Click on the term to highlight it.



- Click on **Preview**.
- Continue viewing, selecting, and previewing search terms until your strategy is complete.

Query box *shows the search term and the search field.*

Result *shows the number of citations.*



Preview automatically ANDs together search terms together and previews the search. Use the **Boolean operators** to combine search terms as needed. If you use the Boolean operators, your search terms are added to the PubMed query box and you must click Preview to see the number of results.

To **OR** together multiple terms from an Index display and then add (i.e., **AND**) them to your search, click on each term while holding down the Crtl-key (PC) or the Command-key (Mac). When all the terms you want are highlighted, click the connector AND to add the terms (OR'ed together) to the query.

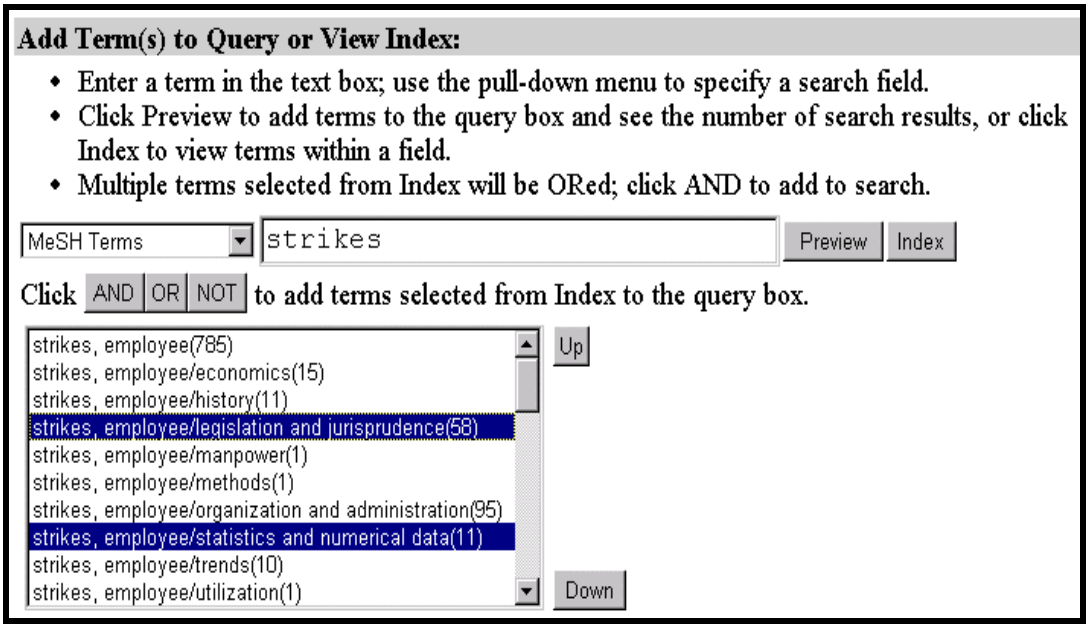
Search example:

- Click to highlight, **strikes, employee** used with the subheading of **legislation and jurisprudence** as well as **strikes, employee** used with the subheading **statistics and numerical data** in the display.
- Click the **AND** button to select and add the terms to the query.
- Multiple selections are automatically OR'ed together.

Holding down the Crtl or Command key; click to highlight the terms.

*Click on the **AND** button.*

Multiple selections are automatically OR'ed together.

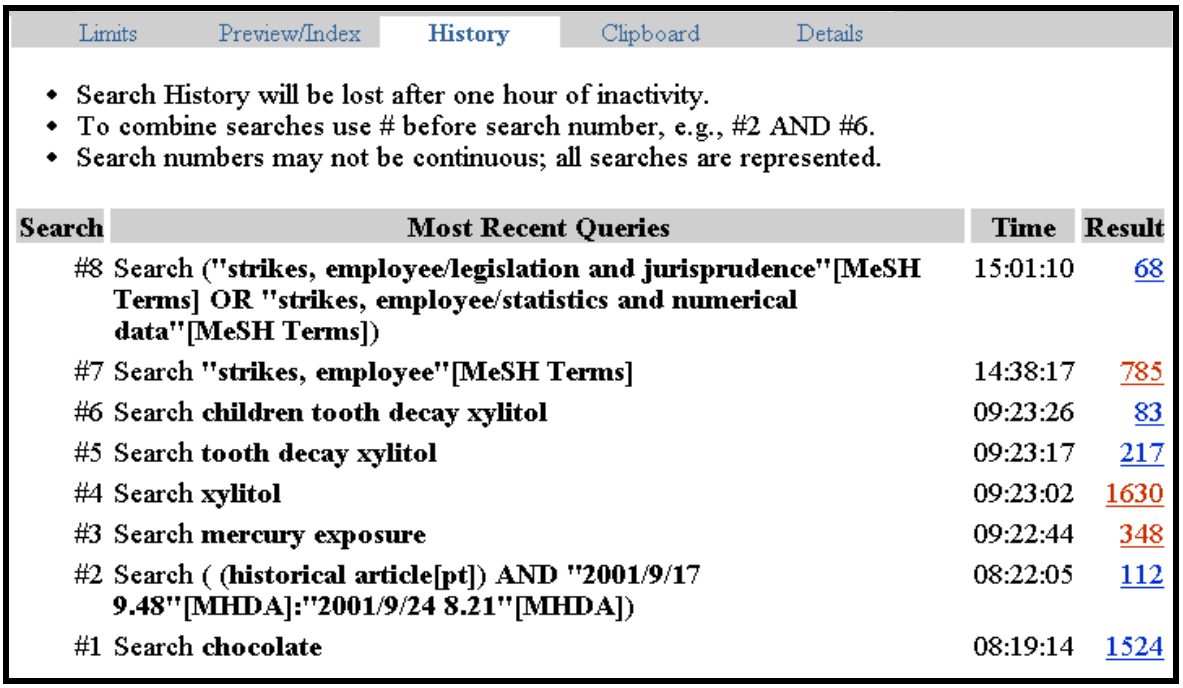


The following search is added to PubMed's query box: **("strikes, employee/legislation and jurisprudence" [MeSH Terms] OR "strikes, employee/statistical and numerical data" [MeSH Terms])**. To run this search in PubMed, click the **Go** button.

Author Field Index: PubMed automatically truncates on the author's name to account for varying initials, e.g., smith j will retrieve smith ja, smith, jb, smith j jr, etc. In the Author Field Index, when an author's name is displayed with the @ symbol after the first initial, this indicates occurrences of the author name without a middle initial. Selecting smith j@ from the index will retrieve smith j only.

History

- History holds all of your search strategies and results.
- History is only available after you run your first search.
- The History screen displays:
  - Your search query
  - The time of the search
  - The number of citations in your search results



Using History

- You can use the search statement numbers shown in history in search strategies.

Example:

Boolean operators must be typed in all caps as shown in the example above.

Other examples: #8 AND #10
#7 OR #14

- You can also use History to Preview search results, just like with the Preview/Index feature.

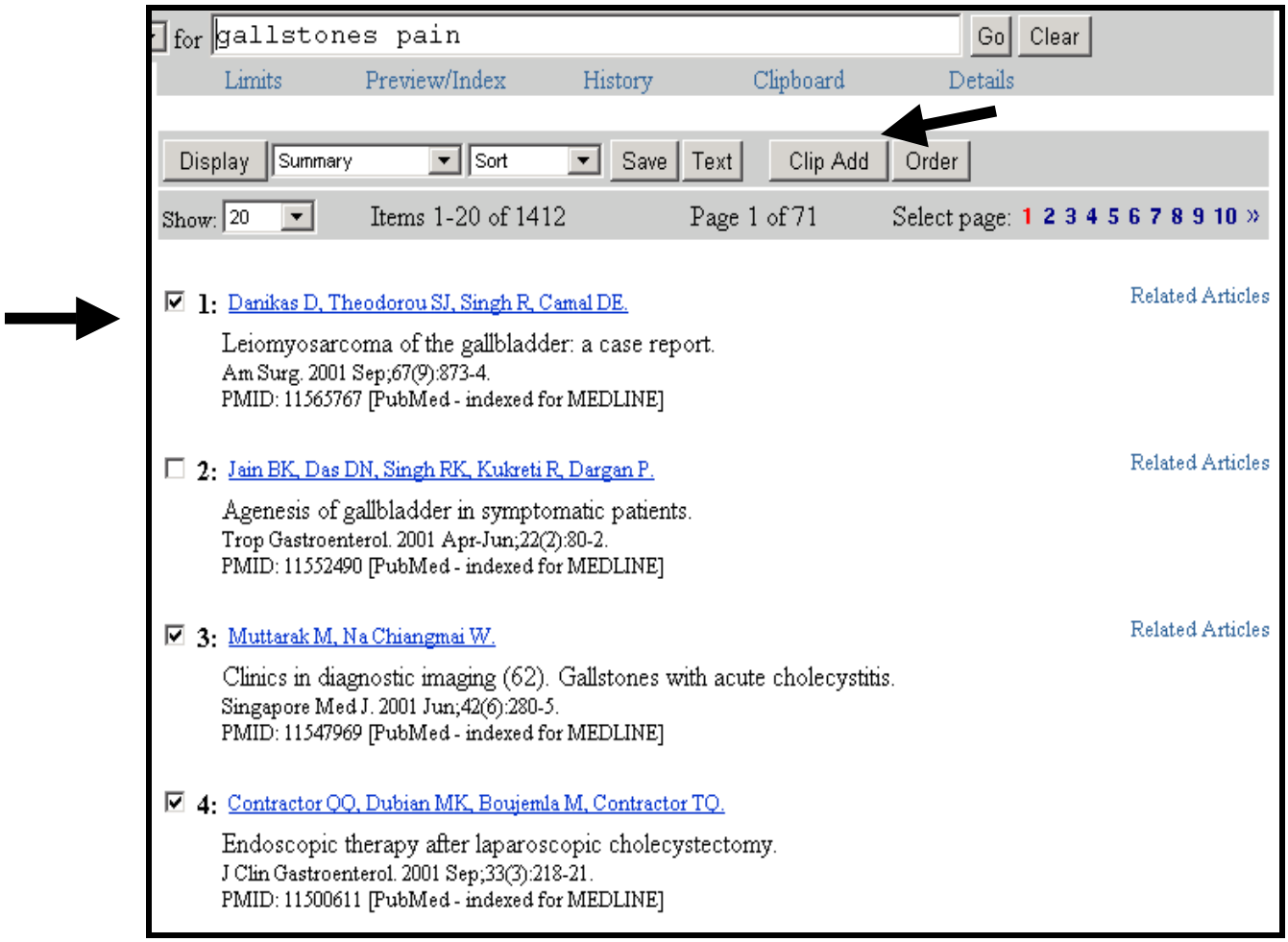
History Tips:

- ✓ Maximum number of queries that can be held in History is **100**.
- ✓ Your search history will automatically be **lost after 1 hour of inactivity**.
- ✓ PubMed will move a search statement number to the top of the History if the new search is the same as a previous search.
- ✓ A separate Search History will be kept for each of the Entrez databases although the search statement numbers will be assigned sequentially for all databases.
- ✓ **Caution**: Search statement numbers from History should not be used in a strategy that you intend to save using the URL button in Details or in search strategies you plan to store in the Cubby. Why not? Although the strategy will be saved, your History will automatically be lost or cleared after 1 hour of inactivity. Any search statement numbers included in the saved strategy will be gone, or possibly replaced by other searches.

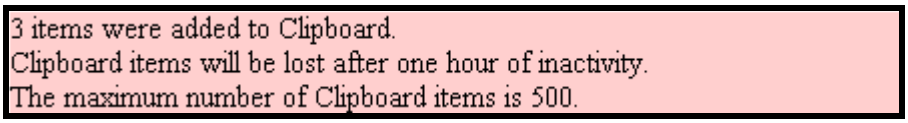
Click on the **Clear History** button available at the bottom of your search History screen to remove all searches from the History.

Clipboard

- Clipboard allows you to save or view selected citations from one search or several searches.



- You can sort, print, save, or order the citations on the Clipboard.
- To place items on the clipboard, click on the check-box to the left of the citation.
- Then click the **Clip Add** button. You get a confirmation message stating that the items are added to the Clipboard.



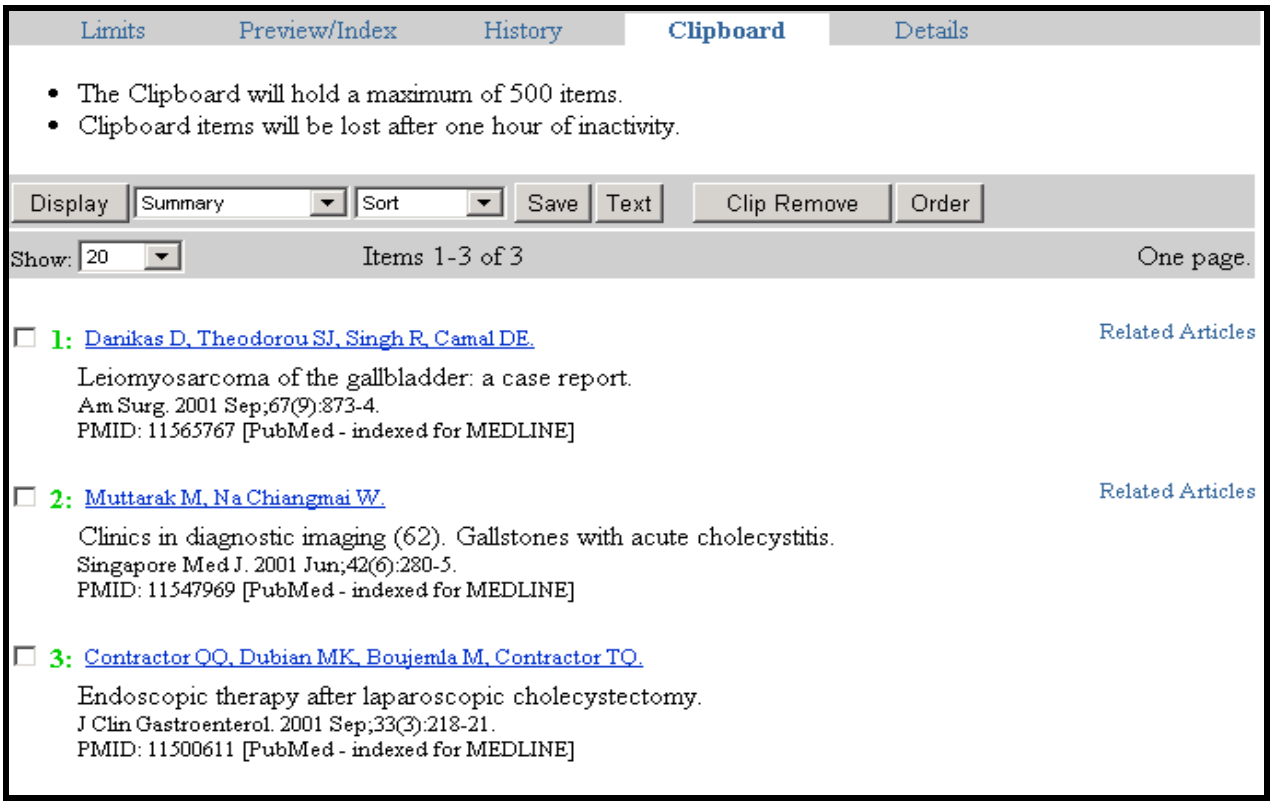
- Once the citations are added to the Clipboard, the item number color changes.

Clipboard Tips:

- ✓ If you click **Clip Add** without selecting citations using the check-box, PubMed will add up to 500 citations to the clipboard.
- ✓ The maximum number of items placed on the clipboard is 500.
- ✓ The clipboard will be lost after one hour of inactivity.

Using the Clipboard

- To view the contents of your clipboard, click on Clipboard from the Features bar.



Sorting items from the Clipboard

- To sort items by author, journal, or publication date, click on the Sort pull-down menu on the Clipboard to select a sort field, then click display.
- Author and Journal sort alphabetically A to Z, the secondary sort is Publication Date.
- Publication Date (i.e., Pub Date) sorts by publication date, displaying the latest publication dates first. The secondary sort is Journal title.

Deleting citations from the Clipboard

- To delete selected citations, click on the box to the left of the item number and then click on the **Clip Remove** button.
- To empty the Clipboard, simply click on the **Clip Remove** button.

Saving citations on the Clipboard

- Select a display format.
- Select citations you wish to save (if you want to save all citations, no selection is necessary).
- Click on the **Save** button.

The search number #0 which may be used in Boolean search statements represents citations on the Clipboard. For example, limit the items on the Clipboard to English language citations using he following search:

#0 AND english [la]

This does not affect or replace the Clipboard contents.

Details

- Clicking on Details displays your search strategy as it was translated by PubMed including MeSH vocabulary term mappings as well as mappings from the PubMed phrase index.
- Error messages (e.g., stopwords, truncation warnings, misspellings) are also displayed.
- The PubMed Query box in Details allows you to edit a search strategy and resubmit it.
- Details also allows you to save a search strategy.

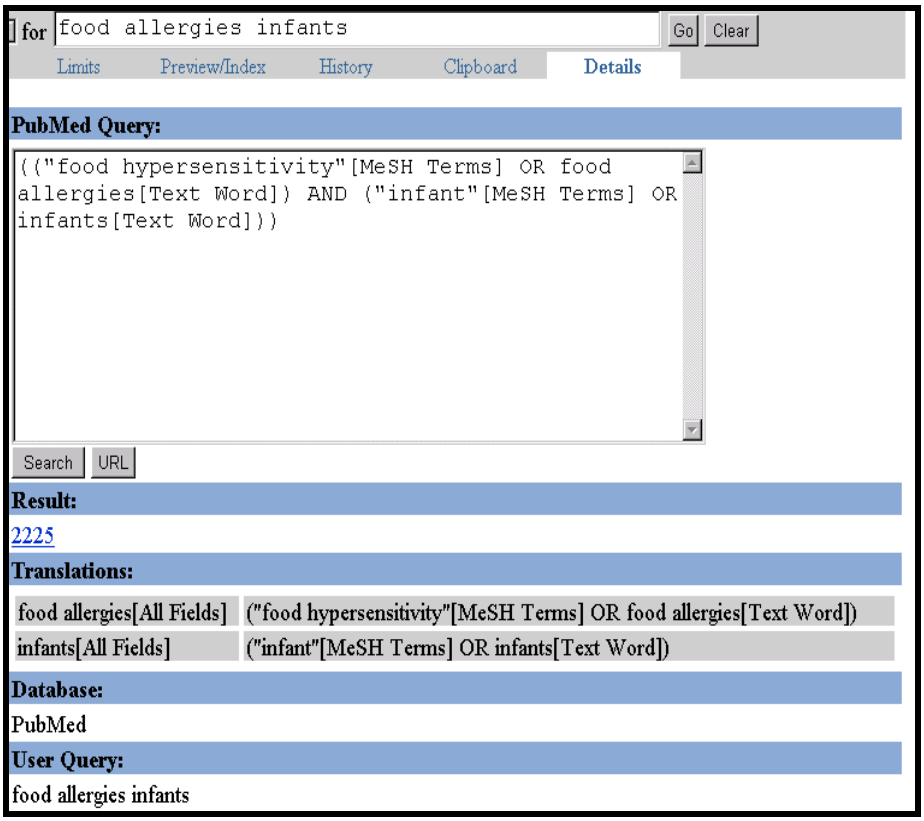
Here's a closer look at Details:

*You can modify the search strategy if you wish and then click on the **Search** button.*

*Click on the **URL** button to create a URL that allows you to save your search strategy.*

*Click on the **Result** number hyperlink to return to the current search results.*

PubMed Translations



Saving a search strategy from Details:

- Click on the **URL** button. PubMed will return to the search results screen. The translated search strategy will be displayed in the query box and this search strategy will also be embedded as part of the URL.

- Next, use your Web browser's bookmark function to save the URL as a bookmark. After saving the bookmark, you may want to use your Web browser's edit functions to rename the bookmark.

- **Caution**: Search statement numbers from History should not be used in a strategy that you intend to save using the URL button in Details or in search strategies you plan to store in the Cubby. Why not? Although the strategy will be saved, your History will automatically be lost or cleared after 1 hour of inactivity. Any search statement numbers included in the saved strategy will be gone, or possibly replaced by other searches.

Current Awareness Searching

If you wish to run a search periodically to retrieve recent information since you last ran the search, you can use the PubMed **Cubby**. See **Cubby Section** of this workbook for detailed information on **Cubby Stored Searches**.

N O T E S

Practice Exercises

1. Using only the query box, find some information about using a living donor for a liver transplantation. Using Limits, further restrict the search to only review articles. Display the results so you can see the MeSH Headings and the entire retrieval is on one page.

2. Locate citations about using a baboon for a bone marrow transplant that were published between 1997-2000.

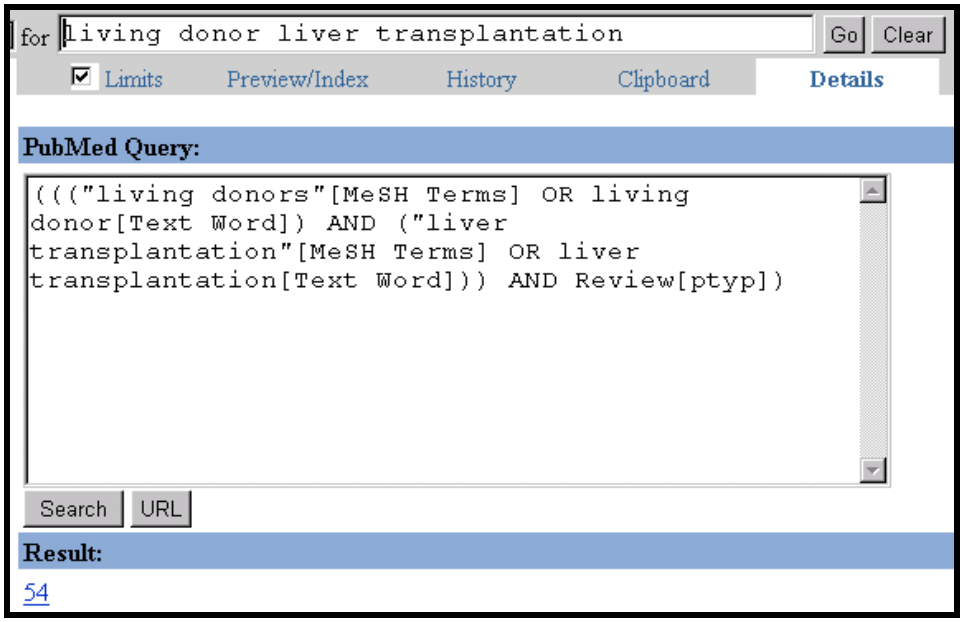
3. Find references about injuries from backpacks or backpacking. Save this search strategy so the search can be run again at a later date.

4. Search the phrase pressure point from the Text Word Index.

5. Find citations about using botox to treat migraines. Add the search results to the Clipboard. Go to the Clipboard to see the items.

Suggested Answers

1. Using only the query box, find some information about using a living donor for a liver transplantation. Using Limits, further restrict the search to only review articles. Display the results so you can see the MeSH Headings and the entire retrieval is on one page.

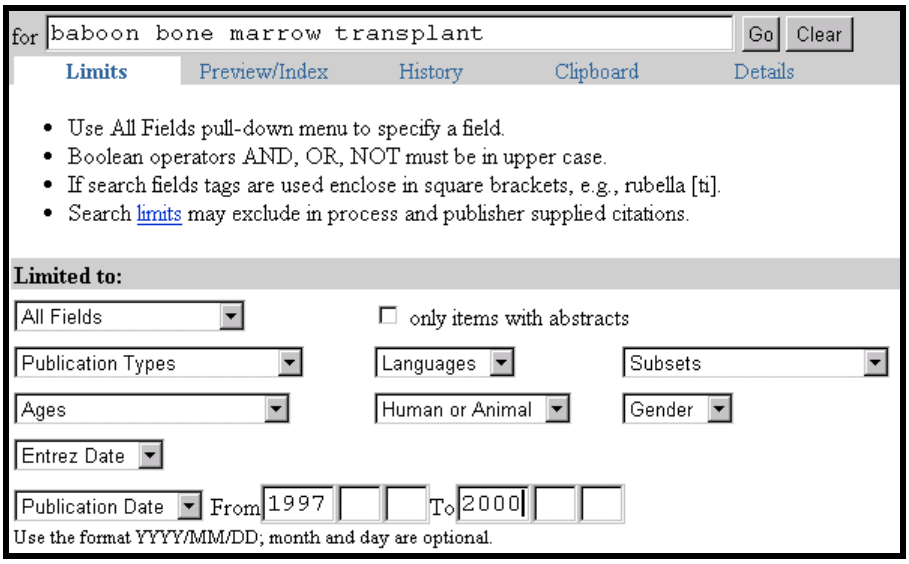


Then Display the results so you see the MeSH headings and the entire retrieval is on one page.

*Use the **Citation** format to see the MeSH terms.*

*Use the **Show** pull-down menu to display all the items on the same Web page.*

2. Locate citations about using a baboon for a bone marrow transplant that were published between 1997-2000.

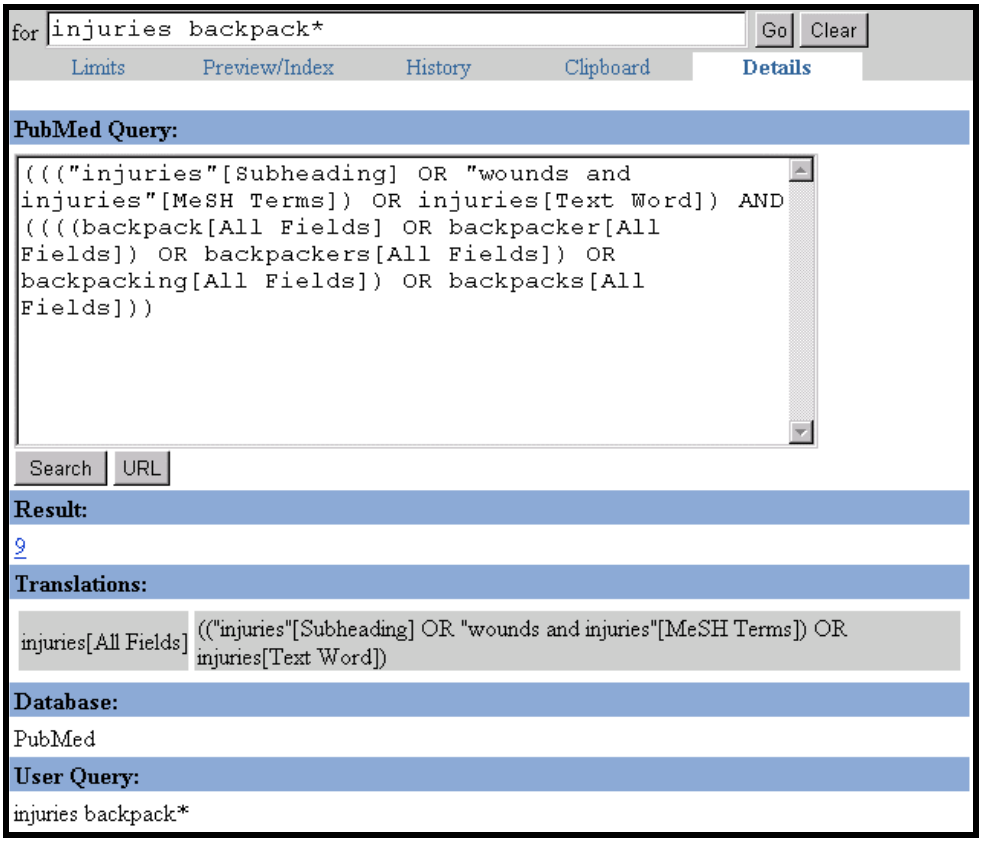


3. Find references about injuries from backpacks or backpacking. Save this search strategy so the search can be run again at a later date.

Details:

If you truncate backpack you pick up:*

Backpack
Backpacker
Backpackers
Backpacking
backpacks



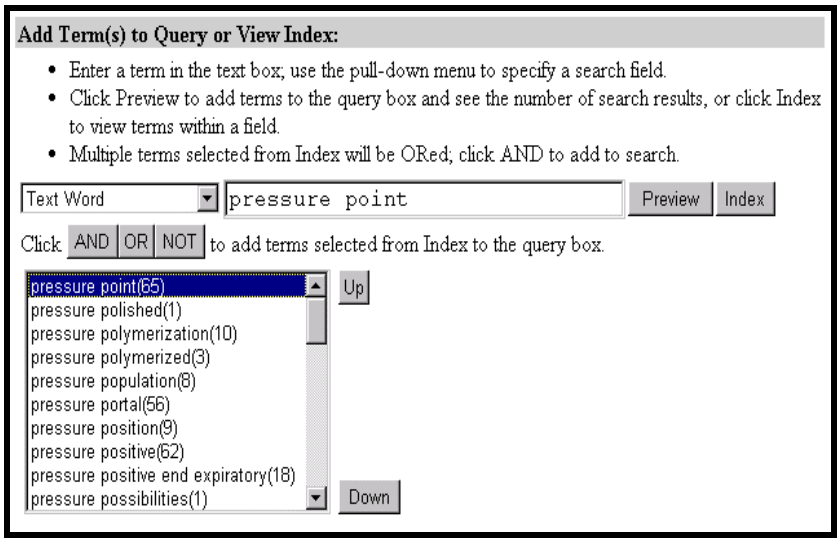
Use the URL button from Details to have PubMed embed the search strategy into a URL. Use your Web browser's bookmark function to save this URL.

4. Search the phrase pressure point from the Text Word Index available on Preview/Index.

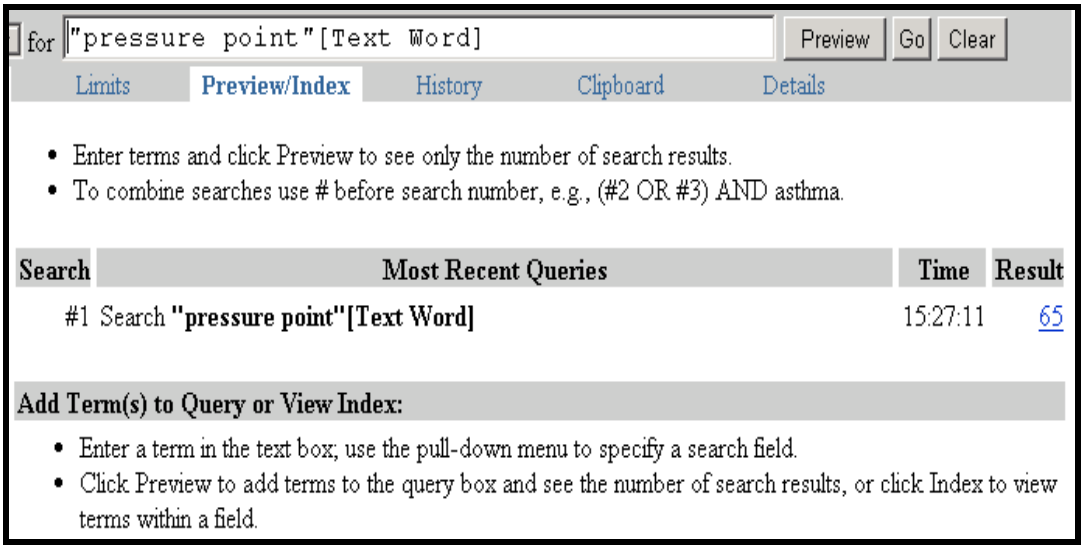
Select Text Word from the All Fields pull-down.

Enter pressure point in the text box.

*Click on **Index** to see pressure point in the Text Word Index.*

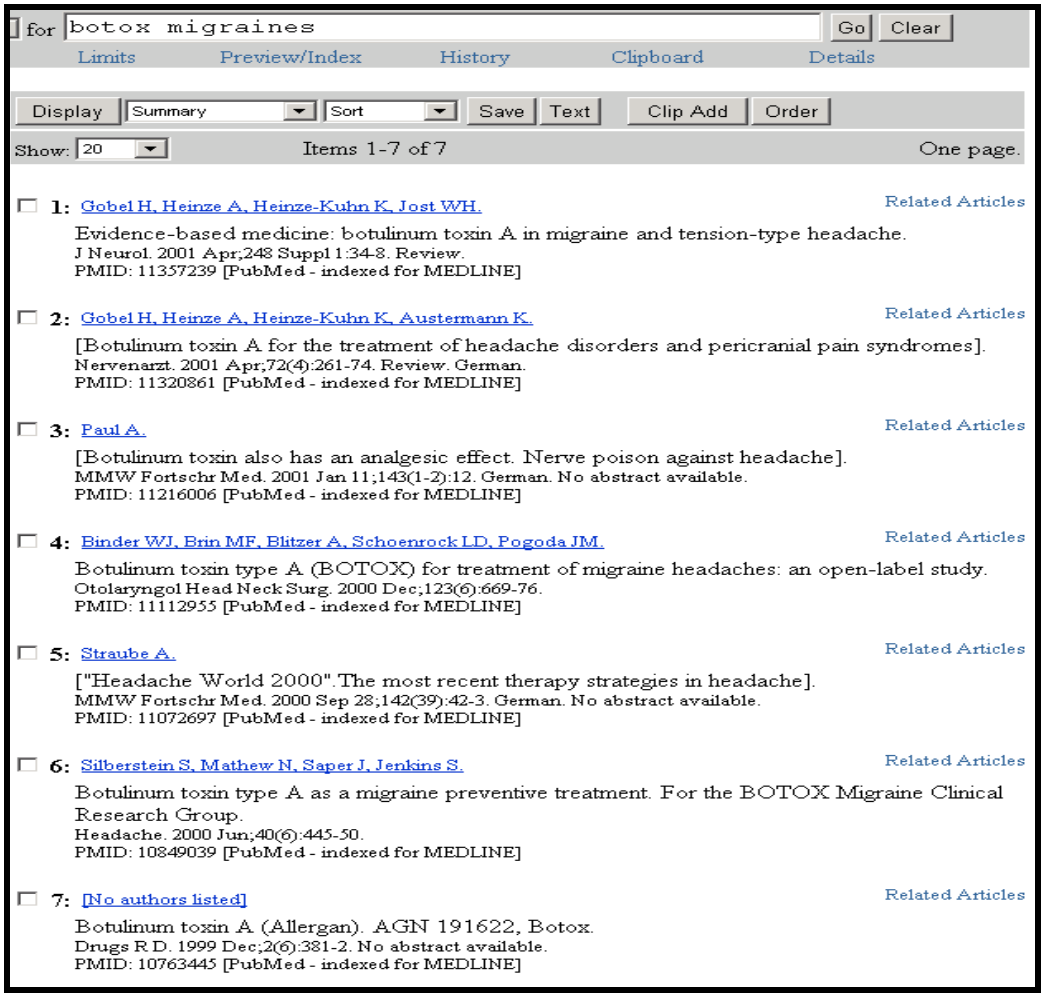


To search from the Index, select pressure point and click **Preview**.

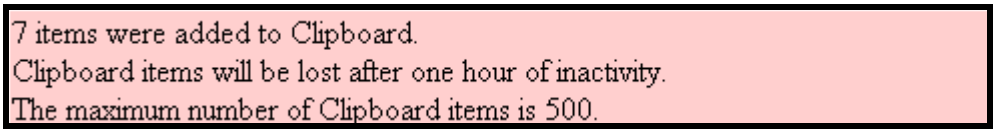


5. Find citations about using botox to treat migraines. Add the search results to the Clipboard. Go to the Clipboard to see the items.

*Enter botox migraines in the query box. Click the **Clip Add** button to add all the items to the Clipboard.*



Once you click the **Clip Add** button, the following message tells you the items were added.



To see the items on the Clipboard, click on **Clipboard** on the Features Bar.

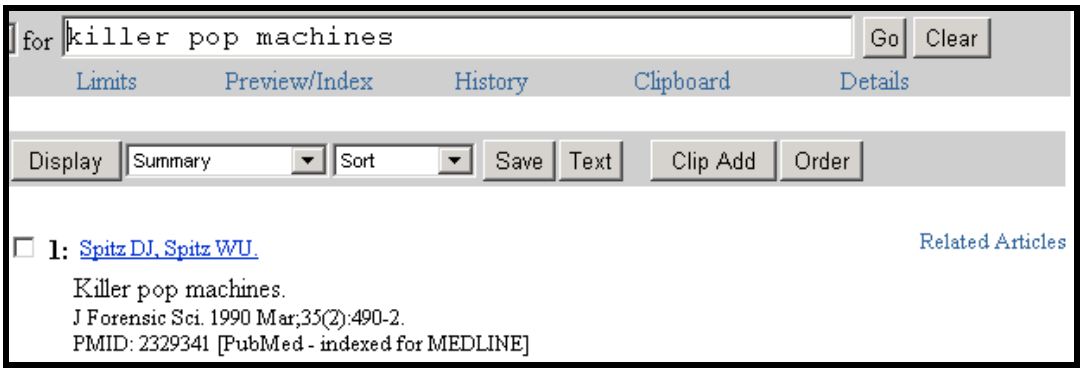
Links

Related Articles

- Citations in PubMed will have a **Related Articles** link. Clicking on this link will access the articles in PubMed, which are most closely related to the original article.
- PubMed compares words from the Title and Abstract of each citation, as well as the MeSH headings assigned, using a powerful word-weighted algorithm.
- The best matches for each citation are saved and stored in a pre-calculated set.
- The Related Articles citation display is in rank order from most to least relevant. The citation you linked from is displayed first.
- You may see a few citations without a Related Articles link. This simply means the citation has not yet gone through the algorithm. This process may take several days.

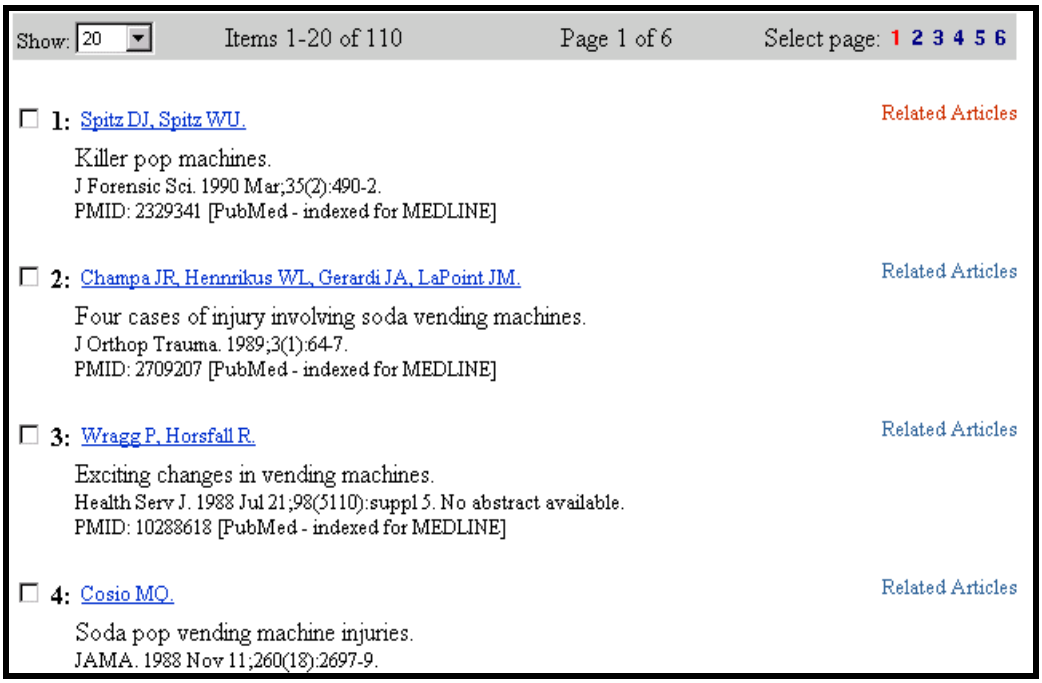
A detailed explanation of the Related Articles algorithm is available in the PubMed **Help** under **Links, Related Articles, Computation of Related Articles**.

Example: *Find citations to articles about killer pop machines.*



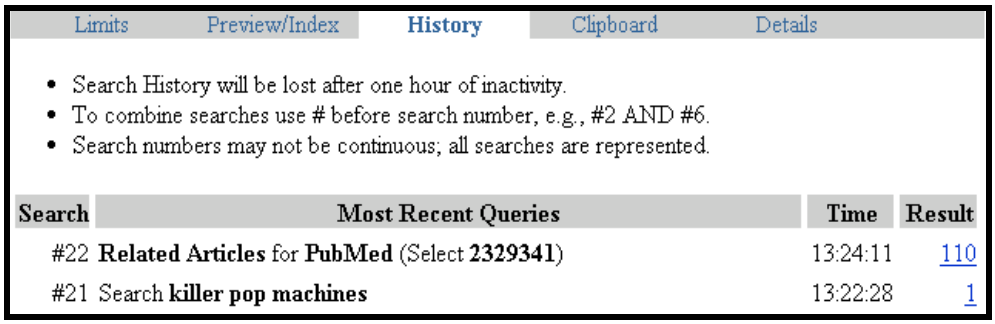
Related Articles Link

- This search retrieves only 1 citation. Now click on the Related Articles link and PubMed will display a list of related citations.



Refining your Related Articles retrieval set:

- Click History
- The Related Articles link is represented as: Related Articles for PubMed (Select 2329341), where 2329341 is the PMID.



- Use the search statement number (e.g., #22) and combine with another concept:

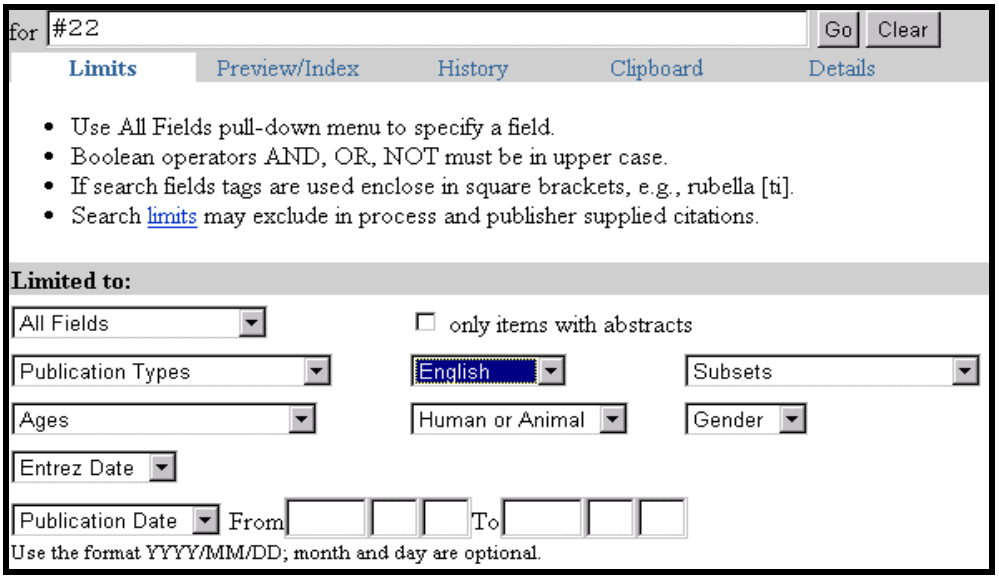
Example: #22 AND English [la]

- Alternatively, use the search statement number in the query box and pull-down menu selection from the Limits screen:

Enter search statement # found in ***History.***

Select limit(s).

Click ***Go.***



Links to Other Resources and NCBI Databases

- **LinkOut** - A service that provides external links from PubMed citations to publisher Web sites for full-text journal articles, biological data, sequence centers, etc. from third parties.

- **Books** - Provides links from individual PubMed journal citations to full-text of molecular biology textbooks .

- **Protein** - Protein sequences from Swiss-Prot, PIR, PRF, PDB, and translated protein sequences from the DNA sequences databases.

- **Nucleotide** - DNA sequences from GenBank, EMBL, and DDBJ.

- **PopSet** - The PopSet database contains aligned sequences submitted as a set from a population, phylogenetic or mutation study describing such events as evolution and population variation.

- **Free in PMC** - Provides links from PubMed journal citations to full-text of articles in PubMed Central (PMC).

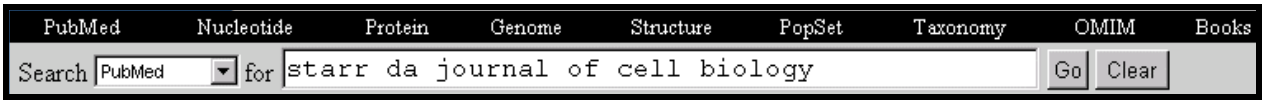
- **Structure** - The Molecular Modeling Database (MMDB) contains 3-dimensional structures determined by X-ray crystallography and NMR spectroscopy.

- **Genome** - Provides access to records and graphic displays of entire genomes and chromosomes for megabase sequences obtained from large-scale sequencing of genomes and chromosomes.

- **Taxonomy** – The NCBI taxonomy database contains the names of all organisms that are represented in the genetic databases with at least one nucleotide or protein sequence.

- **OMIM** - Online Mendelian Inheritance in Man. This database is a catalog of human genes and genetic disorders authored and edited by Dr. Victor A. McKusick and his colleagues at Johns Hopkins and elsewhere, and developed for the Web by NCBI.

Example: *Find citations to articles in the Journal of Cell Biology written by D.A. Starr.*



The publisher's icon link to full-text.

1: J Cell Biol 1997 Sep 22;138(6):1289-301 Related Articles, Nucleotide, OMIM, Protein, Books, LinkOut

FREE full text article at www.jcb.org

Conservation of the centromere/kinetochore protein ZW10.

Starr DA, Williams BC, Li Z, Etemad-Moghadam B, Dawe RK, Goldberg ML.

Section of Genetics and Development, Cornell University, Ithaca, New York 14853-2703, USA.

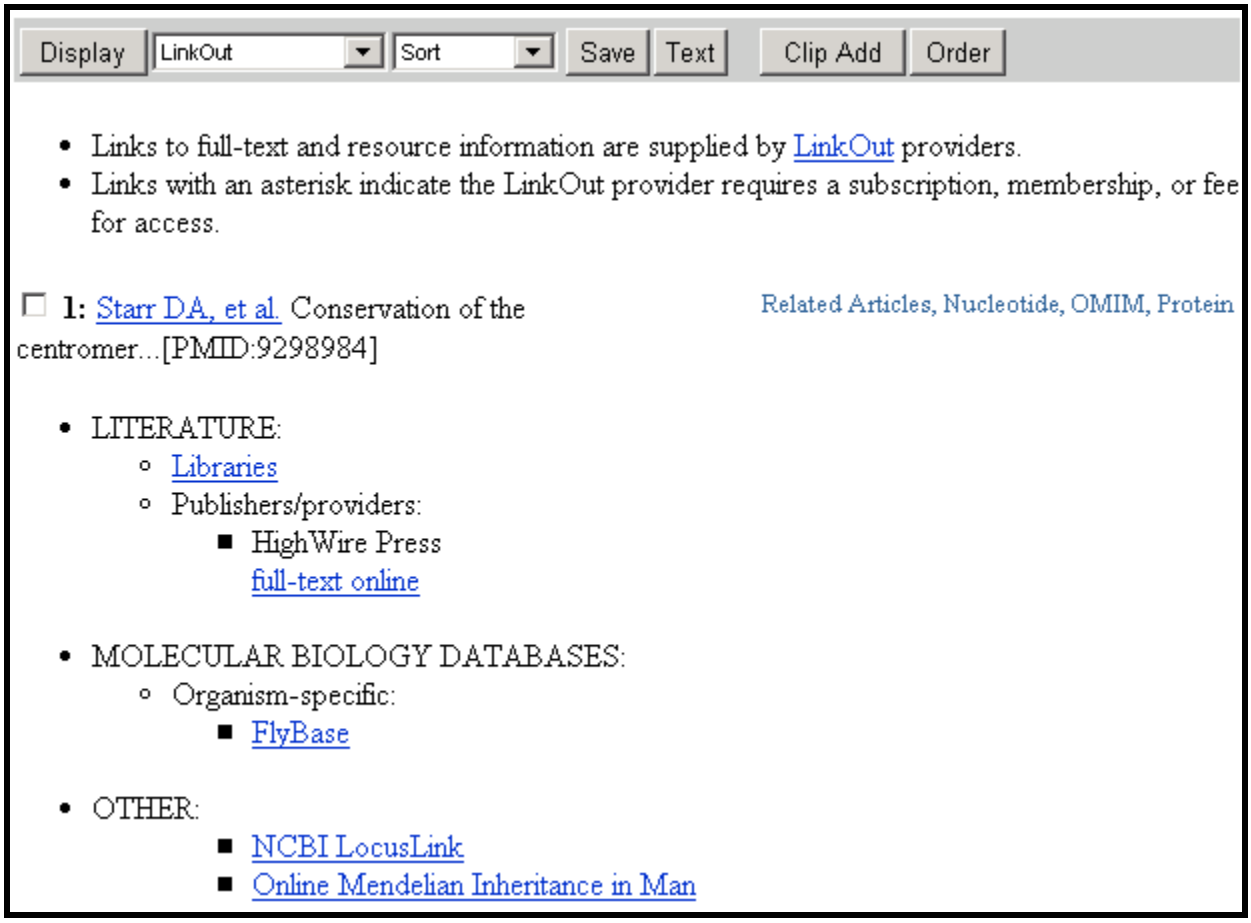
Mutations in the essential Drosophila melanogaster gene zw10 disrupt chromosome segregation, producing chromosomes that lag at the metaphase plate during anaphase of mitosis and both meiotic divisions. Recent evidence suggests that the product of this gene, DmZW10, acts at the kinetochore as part of a tension-sensing checkpoint at anaphase onset. DmZW10 displays an intriguing cell cycle-dependent intracellular distribution, apparently moving from the centromere/kinetochore at prometaphase to kinetochore microtubules at metaphase, and back to the centromere/kinetochore at anaphase (Williams, B.C., M. Gatti, and M.L. Goldberg. 1996. J. Cell Biol. 134:1127-1140). We have identified ZW10-related proteins from widely diverse species with divergent centromere structures, including several Drosophilids, Caenorhabditis elegans, Arabidopsis thaliana, Mus musculus, and humans. Antibodies against the human ZW10 protein display a cell cycle-dependent staining pattern in HeLa cells strikingly similar to that previously observed for DmZW10 in dividing Drosophila cells. Injections of C. elegans ZW10 antisense RNA phenocopies important aspects of the mutant phenotype in Drosophila: these include a strong decrease in brood size, suggesting defects in meiosis or germline mitosis, a high percentage of lethality among the embryos that are produced, and the appearance of chromatin bridges at anaphase. These results indicate that at least some aspects of the functional role of the ZW10 protein in ensuring proper chromosome segregation are conserved across large evolutionary distances.

PMID: 9298984 [PubMed - indexed for MEDLINE]

The Related Articles, Nucleotide, OMIM, Protein, Books, and LinkOut links.

LinkOut Links

- Links to other providers appear on the LinkOut display format.



- The LinkOut format displays (if available) by broad categories (e.g., LITERATURE), and then by subject categories (e.g., Libraries) selected by the LinkOut provider.

- Click on the Libraries link to see the list of libraries providing full-text for the citation.

- Links with an asterisk indicate the LinkOut provider requires a subscription, membership, or fee for access.

The providers supply links to us; corrections and changes to links can be made only by the providers.

Linking back to PubMed from references

Links back to citations in PubMed are often provided within the references at the end of an article viewed from a publisher's Web site:

*Click on **[Medline]** link to go to the PubMed record for this reference.*

References

1. Albertson, D.G., and J.N. Thomson. 1982. The kinetochores of *Caenorhabditis elegans*. *Chromosoma (Berl.)*. 86: 409-428 [Medline].
2. Albertson, D.G., and J.N. Thomson. 1993. Segregation of holocentric chromosomes at meiosis in the nematode, *Caenorhabditis elegans*. *Chromosome Res*. 1: 15-26 [Medline].
3. Ault, J.G., and T.W. Lyttle. 1988. A transmissible dicentric chromosome in *Drosophila melanogaster*. *Chromosoma (Berl.)*. 97: 71-79 .
4. Bai, C., P. Sen, K. Hofmann, L. Ma, M. Gobel, J.W. Harper, and S.J. Elledge. 1996. *SKP1* connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box. *Cell*. 86: 263-274 [Medline].
5. Bajer, A., and J. Mole-Bajer. 1969. Formation of spindle fibers, kinetochore orientation, and behavior of the nuclear envelope during mitosis in endosperm. *Chromosoma (Berl.)*. 27: 448-484 .
6. Barstead, R.J., and R.H. Waterson. 1989. The basal component of the nematode dense-body is vinculin. *J. Biol. Chem*. 264: 10177-10185 [Medline].

Clicking on the [Medline] link for the 4th reference brings you to that citation in PubMed.

1: Cell 1996 Jul 26;86(2):263-74 Related Articles, Nucleotide, OMIM, Protein, Books, LinkOut

Full Text @ Cell Press

SKP1 connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box.

Bai C, Sen P, Hofmann K, Ma L, Goebl M, Harper JW, Elledge SJ.

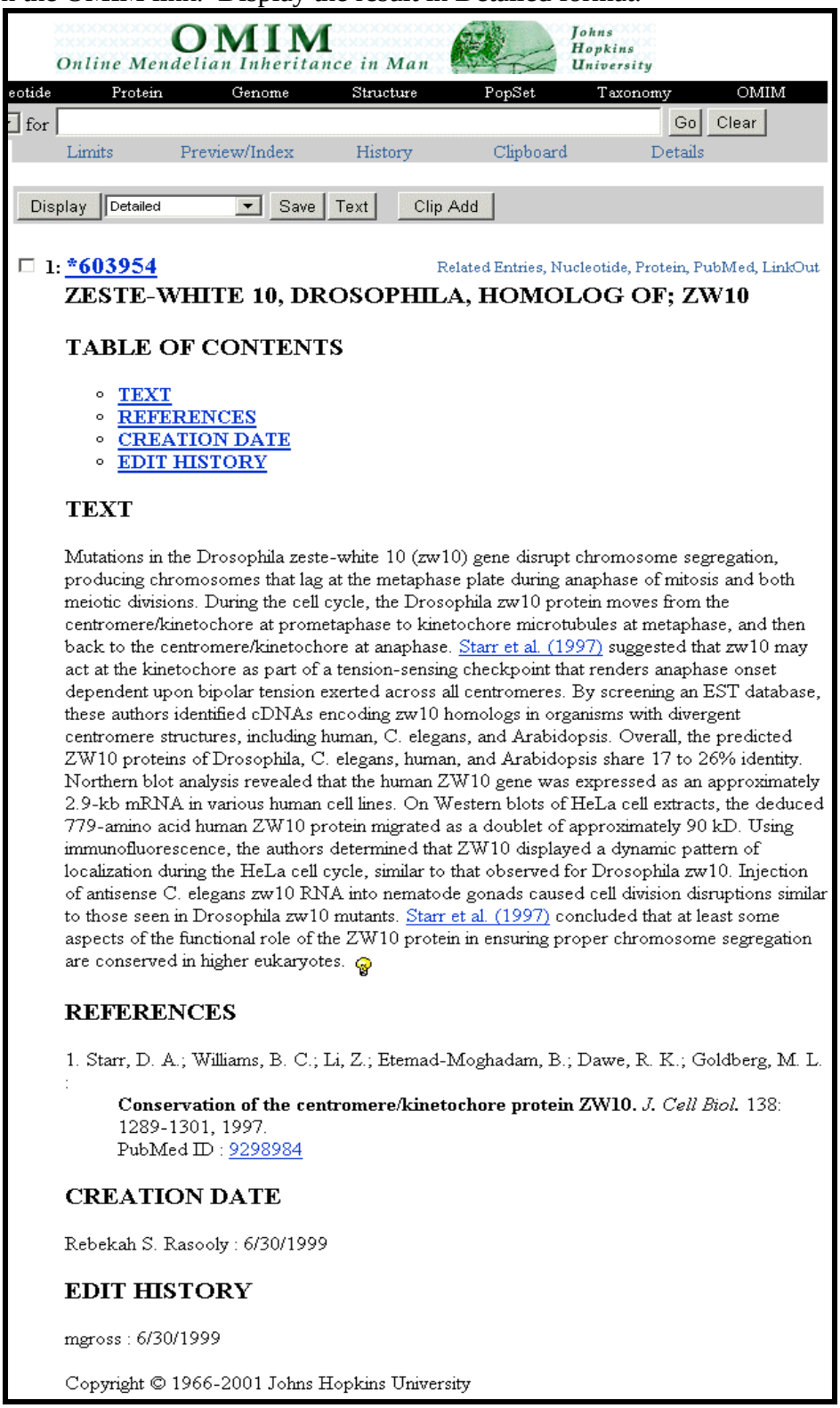
Howard Hughes Medical Institute, Baylor College of Medicine, Houston, Texas 77030, USA.

We have identified the yeast and human homologs of the SKP1 gene as a suppressor of cdc4 mutants and as a cyclin F-binding protein. Skp1p indirectly binds cyclin A/Cdk2 through Skp2p, and directly binds Skp2p, cyclin F, and Cdc4p through a novel structural motif called the F-box. SKP1 is required for ubiquitin-mediated proteolysis of Cin2p, Clb5p, and the Cdk inhibitor Sic1p, and provides a link between these molecules and the proteolysis machinery. A large number of proteins contain the F-box motif and are thereby implicated in the ubiquitin pathway. Different skp1 mutants arrest cells in either G1 or G2, suggesting a connection between regulation of proteolysis in different stages of the cycle.

PMID: 8706131 [PubMed - indexed for MEDLINE]

OMIM Link

- Click on the OMIM link. Display the result in Detailed format.



OMIM
Online Mendelian Inheritance in Man
Johns Hopkins University

eotide Protein Genome Structure PopSet Taxonomy OMIM

for Go Clear

Limits Preview/Index History Clipboard Details

Display Detailed Save Text Clip Add

1: *603954 Related Entries, Nucleotide, Protein, PubMed, LinkOut

ZESTE-WHITE 10, DROSOPHILA, HOMOLOG OF; ZW10

TABLE OF CONTENTS

- TEXT
- REFERENCES
- CREATION DATE
- EDIT HISTORY

TEXT

Mutations in the Drosophila zeste-white 10 (zw10) gene disrupt chromosome segregation, producing chromosomes that lag at the metaphase plate during anaphase of mitosis and both meiotic divisions. During the cell cycle, the Drosophila zw10 protein moves from the centromere/kinetochore at prometaphase to kinetochore microtubules at metaphase, and then back to the centromere/kinetochore at anaphase. Starr et al. (1997) suggested that zw10 may act at the kinetochore as part of a tension-sensing checkpoint that renders anaphase onset dependent upon bipolar tension exerted across all centromeres. By screening an EST database, these authors identified cDNAs encoding zw10 homologs in organisms with divergent centromere structures, including human, C. elegans, and Arabidopsis. Overall, the predicted ZW10 proteins of Drosophila, C. elegans, human, and Arabidopsis share 17 to 26% identity. Northern blot analysis revealed that the human ZW10 gene was expressed as an approximately 2.9-kb mRNA in various human cell lines. On Western blots of HeLa cell extracts, the deduced 779-amino acid human ZW10 protein migrated as a doublet of approximately 90 kD. Using immunofluorescence, the authors determined that ZW10 displayed a dynamic pattern of localization during the HeLa cell cycle, similar to that observed for Drosophila zw10. Injection of antisense C. elegans zw10 RNA into nematode gonads caused cell division disruptions similar to those seen in Drosophila zw10 mutants. Starr et al. (1997) concluded that at least some aspects of the functional role of the ZW10 protein in ensuring proper chromosome segregation are conserved in higher eukaryotes.

REFERENCES

1. Starr, D. A.; Williams, B. C.; Li, Z.; Etemad-Moghadam, B.; Dawe, R. K.; Goldberg, M. L. :
Conservation of the centromere/kinetochore protein ZW10. *J. Cell Biol.* 138: 1289-1301, 1997.
PubMed ID : 9298984

CREATION DATE

Rebekah S. Rasooly : 6/30/1999

EDIT HISTORY

mgross : 6/30/1999

Books Link

- When viewing a PubMed abstract, click on the “Books” hyperlink.

- This takes you to a facsimile of the Citation format, in which some phrases are hypertext links. These phrases correspond to terms that are also found in the books available at NCBI.

*Note the term **Drosophila melanogaster** is a hypertext link.*

J Cell Biol 1997 Sep 22;138(6):1289-301 Related Articles, Nucleotide, OMIM, Protein, LinkOut

FREE full text article at www.jcb.org

Conservation of the centromere/kinetochore protein ZW10.

Starr DA, Williams BC, Li Z, Etemad-Moghadam B, Dawe RK, Goldberg ML.

Section of Genetics and Development, Cornell University, Ithaca, New York 14853-2703, USA.

Mutations in the essential Drosophila melanogaster gene zw10 disrupt chromosome segregation, producing chromosomes that lag at the metaphase plate during anaphase of mitosis and both meiotic divisions. Recent evidence suggests that the product of this gene, DmZW10, acts at the kinetochore as part of a tension-sensing checkpoint at anaphase onset. DmZW10 displays an intriguing cell cycle-dependent intracellular distribution, apparently moving from the centromere/kinetochore at prometaphase to kinetochore microtubules at metaphase, and back to the centromere/kinetochore at anaphase (Williams, B.C., M. Gatti, and M.L. Goldberg. 1996. J. Cell Biol. 134:1127-1140). We have identified ZW10-related proteins from widely diverse species with divergent centromere structures, including several Drosophilids, Caenorhabditis elegans, Arabidopsis thaliana, Mus musculus, and humans. Antibodies against the human ZW10 protein display a cell cycle-dependent staining pattern in HeLa cells strikingly similar to that previously observed for DmZW10 in dividing Drosophila cells. Injections of C. elegans ZW10 antisense RNA phenocopies important aspects of the mutant phenotype in Drosophila: these include a strong decrease in brood size, suggesting defects in meiosis or germline mitosis, a high percentage of lethality among the embryos that are produced, and the appearance of chromatin bridges at anaphase. These results indicate that at least some aspects of the functional role of the ZW10 protein in ensuring proper chromosome segregation are conserved across large evolutionary distances.

MeSH Terms:
- Animal
- Arabidopsis
- Caenorhabditis elegans
- Cell Cycle/physiology
- Centromere/chemistry*
- Chromosomes/physiology
- Cloning, Molecular
- Drosophila
- Hela Cells
- Human
- Insect Proteins/genetics*
- Insect Proteins/analysis*
- Mice
- Microinjections
- Molecular Sequence Data
- Mutation/physiology
- RNA, Antisense/pharmacology
- Recombinant Fusion Proteins/analysis
- Sequence Homology, Amino Acid
- Support, U.S. Gov't, P.H.S.

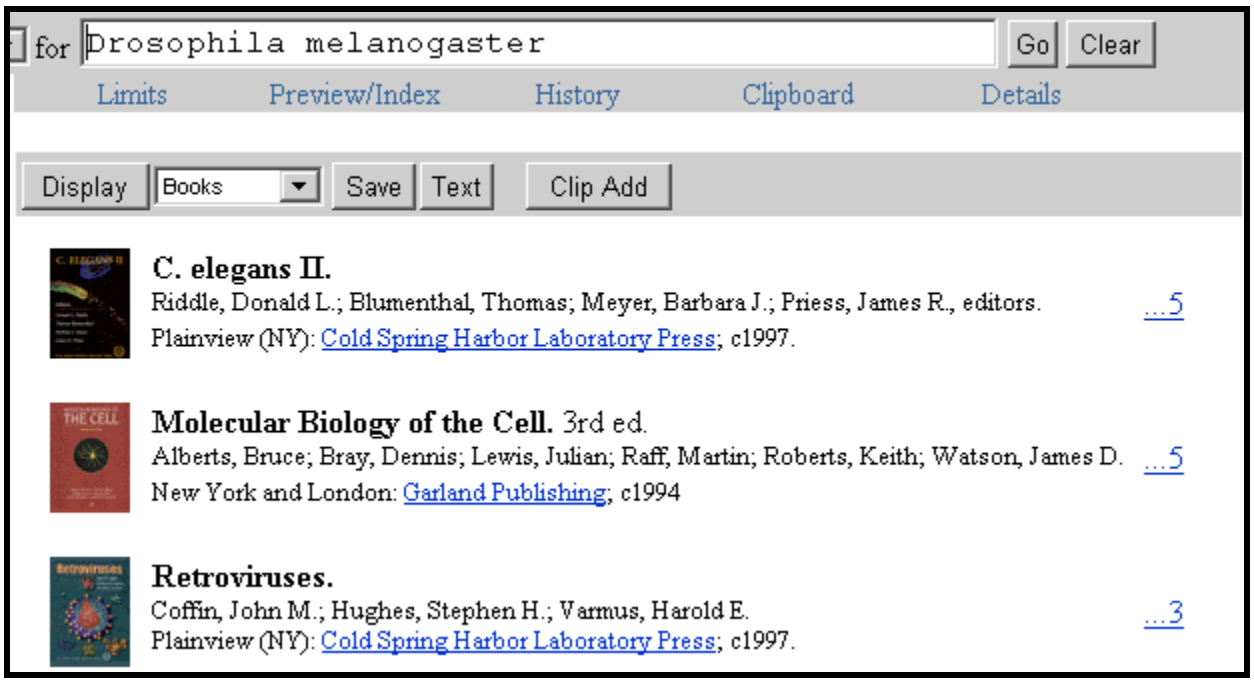
Substances:
- Zw10 protein
- Recombinant Fusion Proteins
- RNA, Antisense
- Insect Proteins

Secondary source id:
- GENBANK/U80984
- GENBANK/U54998
- GENBANK/U54997
- GENBANK/U54996
- GENBANK/AF003951

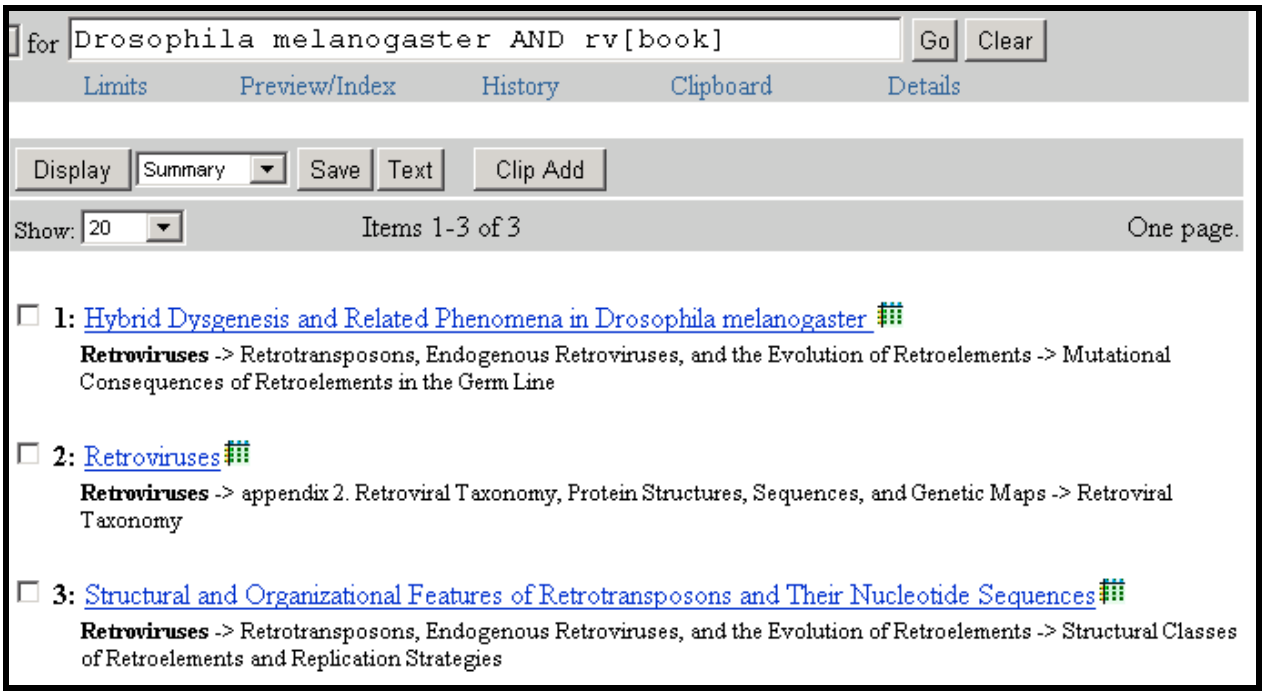
Grant support:
- GM48430/GM/NIGMS
- GM07617/GM/NIGMS

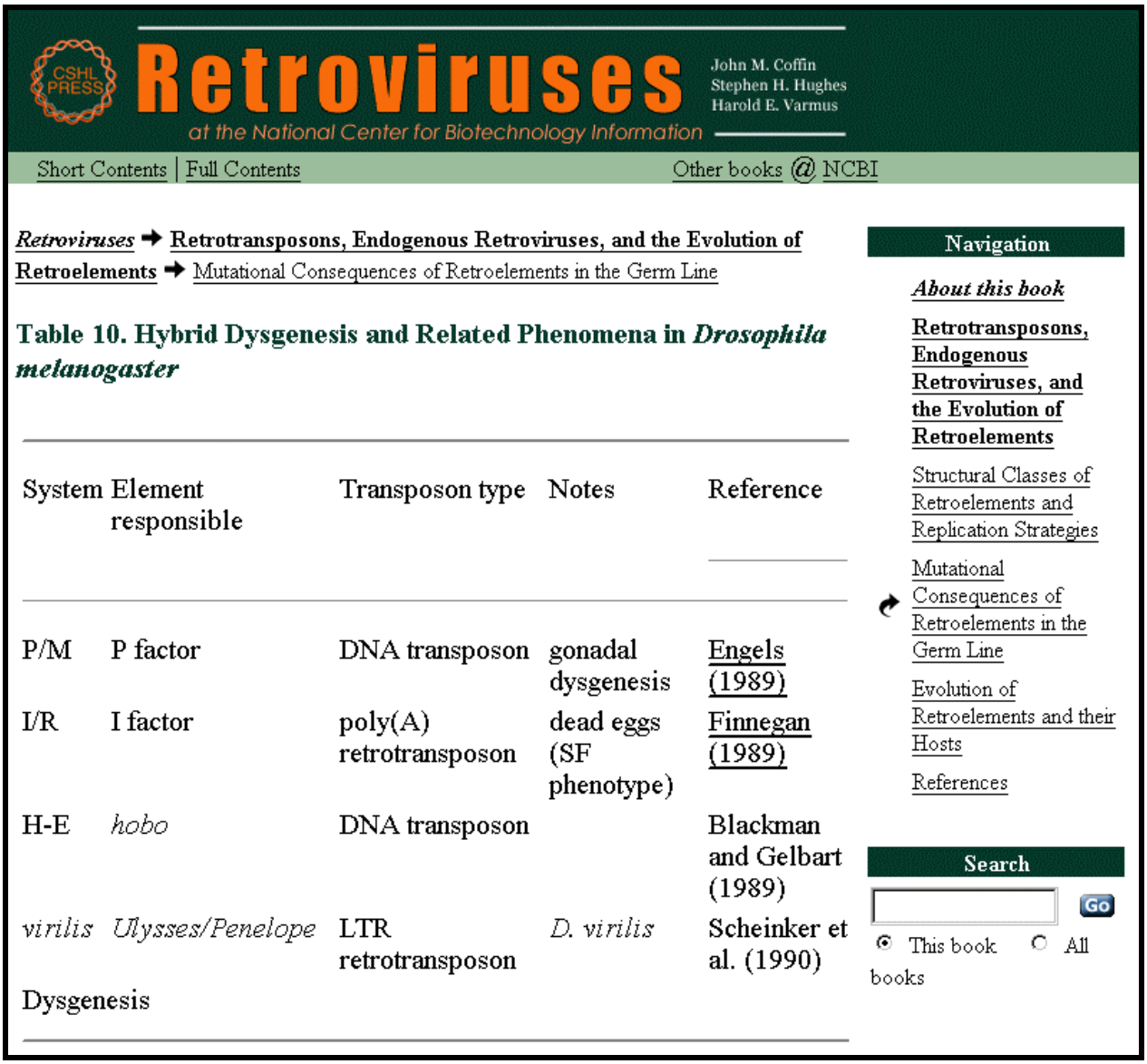
PMID: 9298984 [PubMed - indexed for MEDLINE]

- Clicking on a hypertext link (e.g., Drosophila melanogaster) takes you to a list of books in which the phrase is found. Click on the hypertext link (e.g., …3) to see the sections of Retroviruses that discuss the fruit fly.



- The three sections are displayed in a summary format. Choose a section title to learn more about fruit fly.





Retroviruses
John M. Coffin
Stephen H. Hughes
Harold E. Varmus
at the National Center for Biotechnology Information

Short Contents | Full Contents Other books @ NCBI

Retroviruses ➜ **Retrotransposons, Endogenous Retroviruses, and the Evolution of Retroelements** ➜ Mutational Consequences of Retroelements in the Germ Line

Table 10. Hybrid Dysgenesis and Related Phenomena in *Drosophila melanogaster*

System	Element responsible	Transposon type	Notes	Reference
P/M	P factor	DNA transposon	gonadal dysgenesis	Engels (1989)
I/R	I factor	poly(A) retrotransposon	dead eggs (SF phenotype)	Finnegan (1989)
H-E	*hobo*	DNA transposon		Blackman and Gelbart (1989)
virilis Dysgenesis	*Ulysses/Penelope*	LTR retrotransposon	*D. virilis*	Scheinker et al. (1990)

Navigation

About this book

Retrotransposons, Endogenous Retroviruses, and the Evolution of Retroelements

Structural Classes of Retroelements and Replication Strategies

Mutational Consequences of Retroelements in the Germ Line

Evolution of Retroelements and their Hosts

References

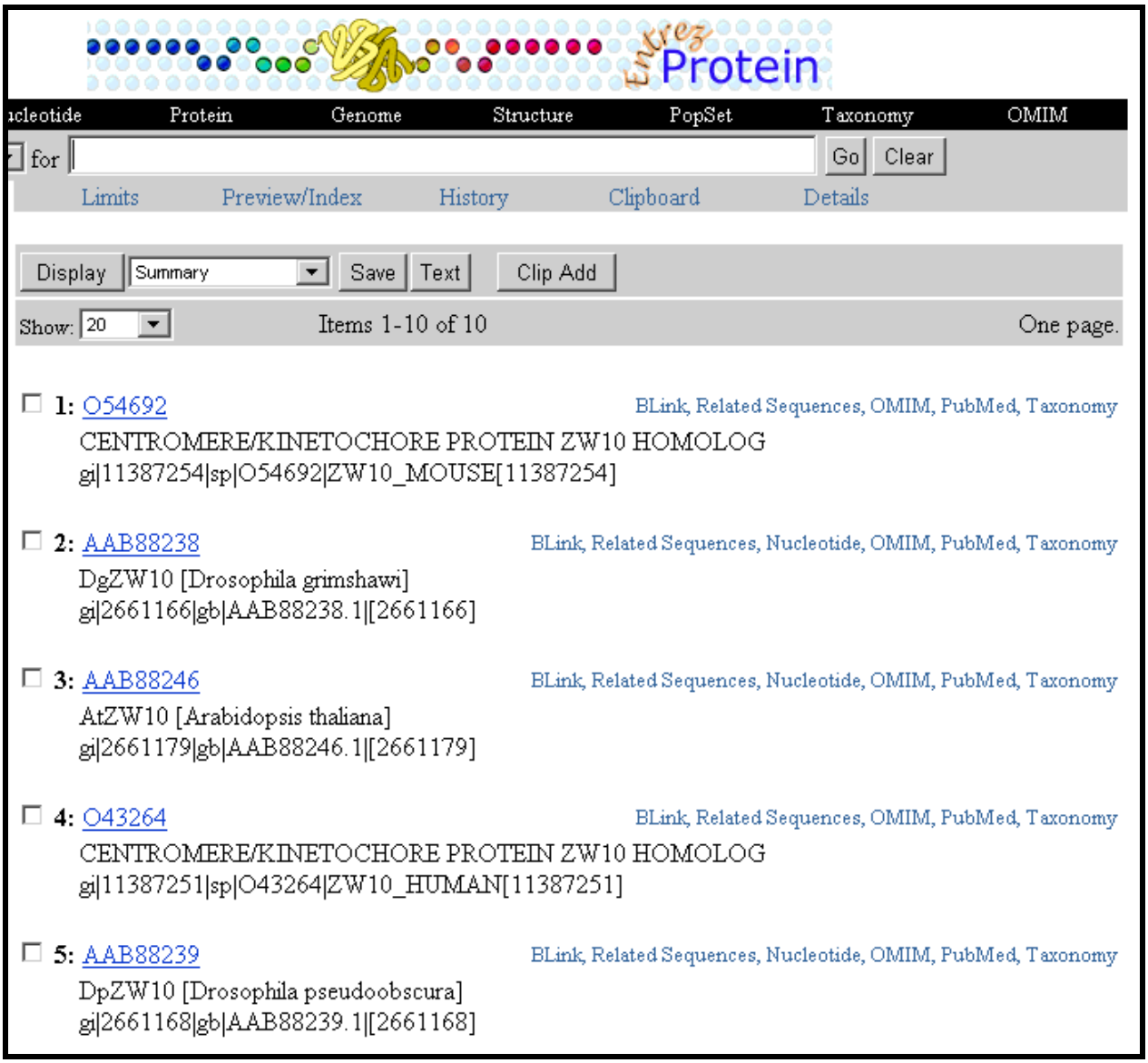
Search

Go

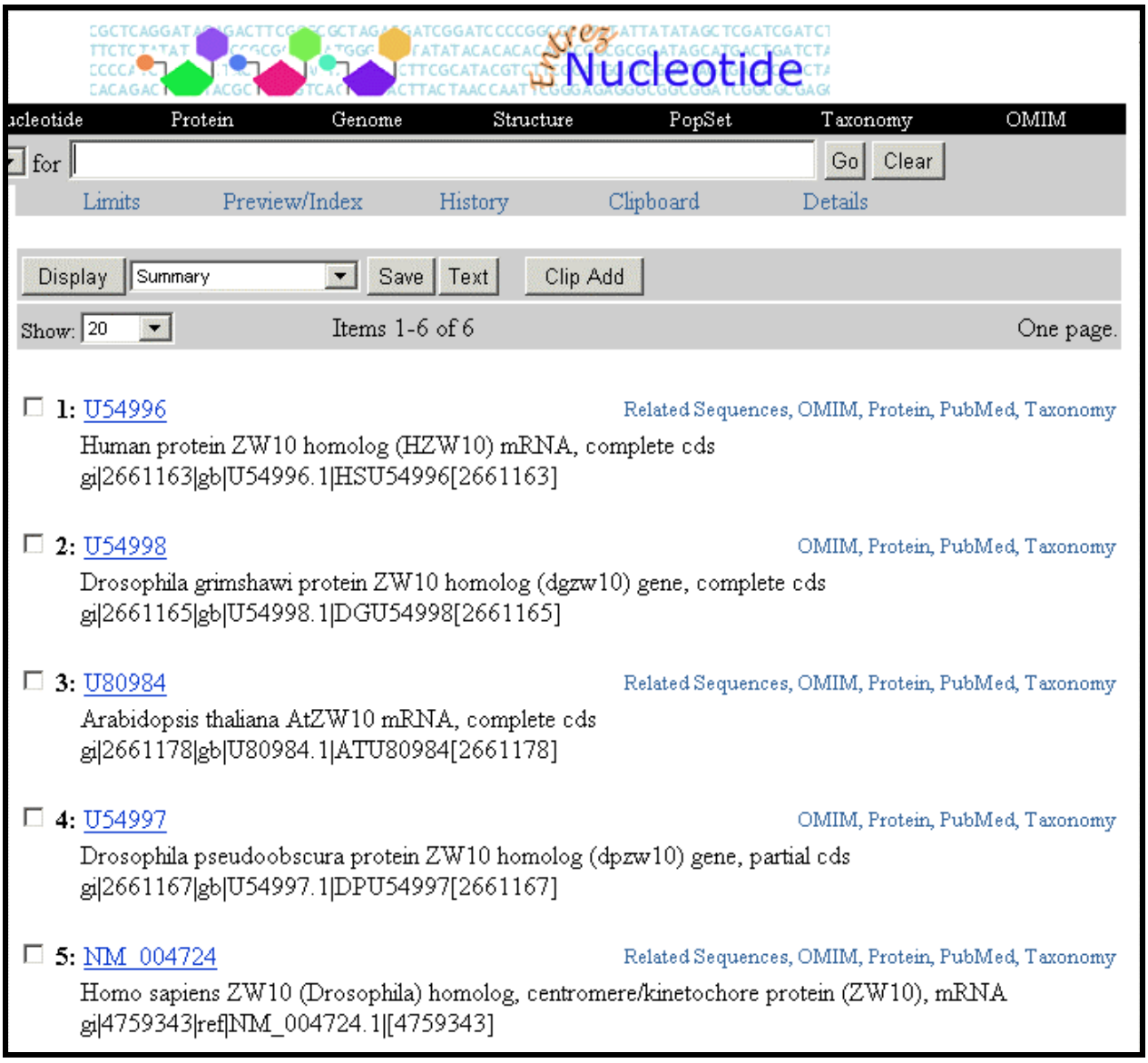
This book All books

To learn more about Books, go to the Bookshelf at http://www.ncbi.nlm.nih.gov:80/entrez/query.fcgi?db=Books.

Protein Link



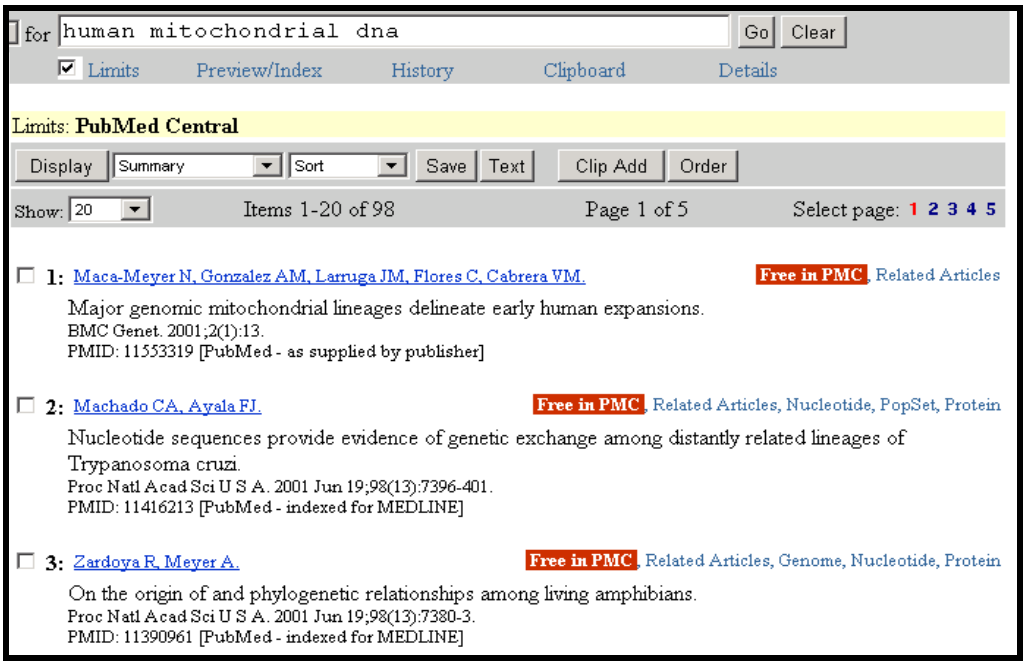
Nucleotide Link



Free in PMC Link

- The first links from PubMed citations to the free full text of articles in PubMed Central were added in August 2000.
- PubMed Central (PMC) [http://pubmedcentral.gov/] is the National Institutes of Health's repository for peer-reviewed primary research reports in the life sciences.

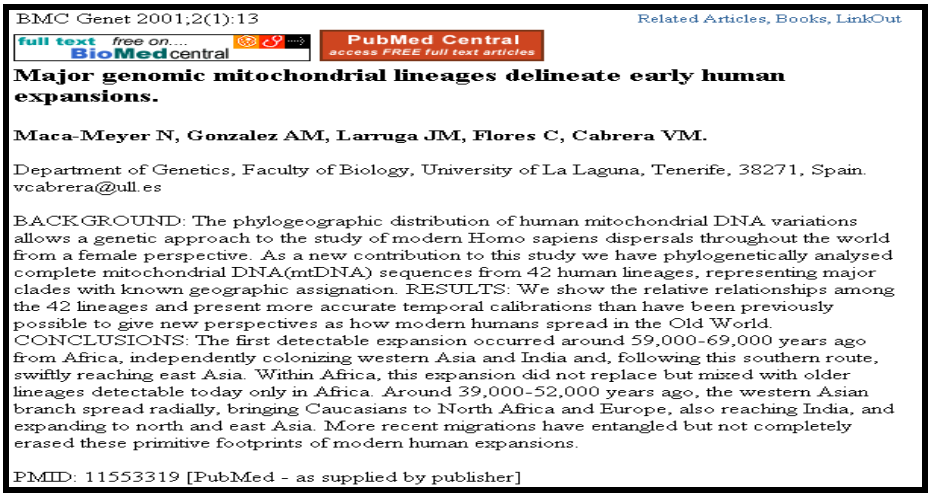
Example: *Find citations to articles about human mitochondrial DNA. Limit the search results to PubMed Central using the Subset pull-down menu on the Limits screen.*



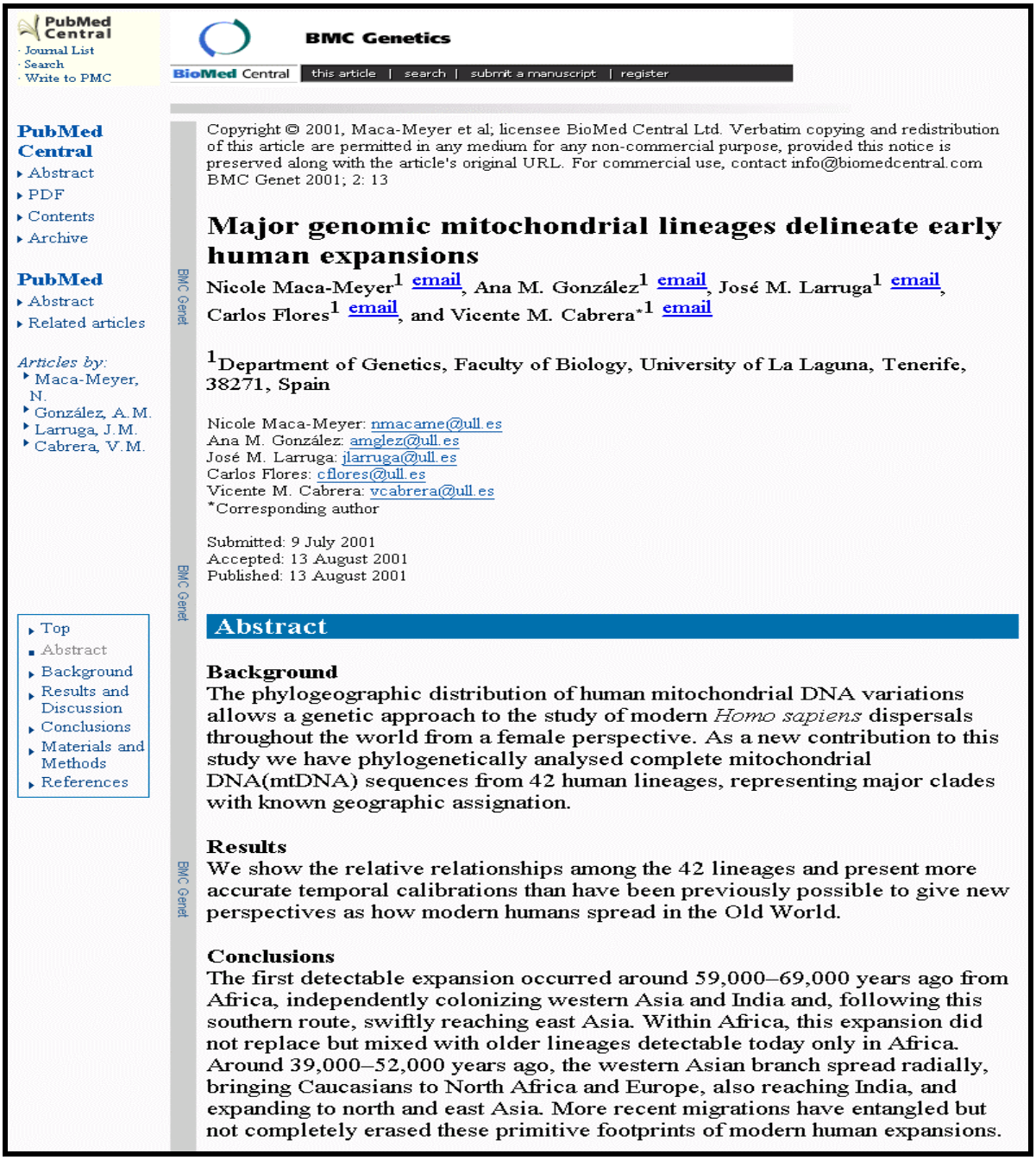
Free in PMC *link indicates full-text available in PubMed Central.*

- Click on **Free in PMC** to link to the PubMed Abstract display format.

PubMed Central access Free full Text articles *icon links to full-text of article in PubMed Central.*



- Click on the PubMed Central access Free full text articles icon to link to the free full-text in PubMed Central.
- Portion of free full-text article in PubMed Central.



PubMed Central
· Journal List
· Search
· Write to PMC

BMC Genetics

BioMed Central | this article | search | submit a manuscript | register

PubMed Central
- Abstract
- PDF
- Contents
- Archive

PubMed
- Abstract
- Related articles

Articles by:
- Maca-Meyer, N.
- González, A.M.
- Larruga, J.M.
- Cabrera, V.M.

- Top
- Abstract
- Background
- Results and Discussion
- Conclusions
- Materials and Methods
- References

BMC Genet 2001; 2: 13

Major genomic mitochondrial lineages delineate early human expansions

Nicole Maca-Meyer[1] email, Ana M. González[1] email, José M. Larruga[1] email, Carlos Flores[1] email, and Vicente M. Cabrera*[1] email

[1]Department of Genetics, Faculty of Biology, University of La Laguna, Tenerife, 38271, Spain

Nicole Maca-Meyer: nmacame@ull.es
Ana M. González: amglez@ull.es
José M. Larruga: jlarruga@ull.es
Carlos Flores: cflores@ull.es
Vicente M. Cabrera: vcabrera@ull.es
*Corresponding author

Submitted: 9 July 2001
Accepted: 13 August 2001
Published: 13 August 2001

Abstract

Background
The phylogeographic distribution of human mitochondrial DNA variations allows a genetic approach to the study of modern *Homo sapiens* dispersals throughout the world from a female perspective. As a new contribution to this study we have phylogenetically analysed complete mitochondrial DNA(mtDNA) sequences from 42 human lineages, representing major clades with known geographic assignation.

Results
We show the relative relationships among the 42 lineages and present more accurate temporal calibrations than have been previously possible to give new perspectives as how modern humans spread in the Old World.

Conclusions
The first detectable expansion occurred around 59,000–69,000 years ago from Africa, independently colonizing western Asia and India and, following this southern route, swiftly reaching east Asia. Within Africa, this expansion did not replace but mixed with older lineages detectable today only in Africa. Around 39,000–52,000 years ago, the western Asian branch spread radially, bringing Caucasians to North Africa and Europe, also reaching India, and expanding to north and east Asia. More recent migrations have entangled but not completely erased these primitive footprints of modern human expansions.

The full-text can be viewed both as HTML through your web browser and in downloadable PDF format.

N O T E S

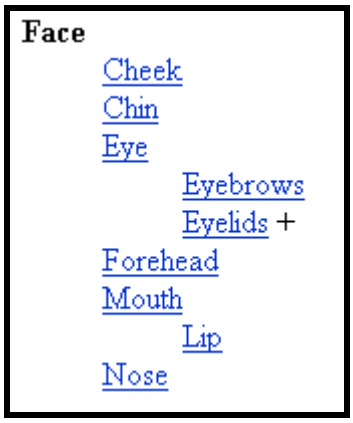
Searching with MeSH

Two selections are available for MeSH searching from the field selection pull-down menu from Limits:

- MeSH Terms - Use when you want to qualify a term so that it is searched only as a MeSH heading. Unqualified search terms that are MeSH headings will automatically be searched as a MeSH term *as well as* a Text Word.

When a term is searched as a MeSH Heading, PubMed automatically searches that heading and the more specific headings underneath in the hierarchy. This is called exploding a term.

For example, the MeSH term **Face** when searched as MeSH Term in PubMed would search the heading Face as well as all the more specific terms below the term in the hierarchy:



Searching with MeSH terms will ***exclude*** in process citations and publisher-supplied citations as they have not been indexed with MeSH headings.

- MeSH Major Topic - Use when you wish to limit to articles where the topic is the main point of the article.

PubMed's MeSH Browser

PubMed's MeSH Browser allows you to:

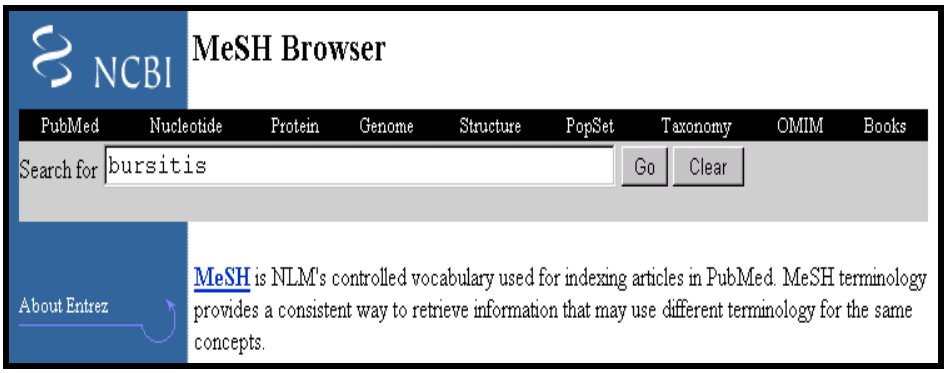
- Display MeSH terms in a hierarchical structure.
- Select MeSH terms for searching.
- Limit MeSH terms to a major concept.
- Attach subheadings.

How to Get There

- Click on MeSH Browser on the sidebar.

Now, let's use the MeSH Browser to build a search strategy for a search for citations about **bursitis**.

*Enter the term **bursitis** in the query box and click the **Go** button.*

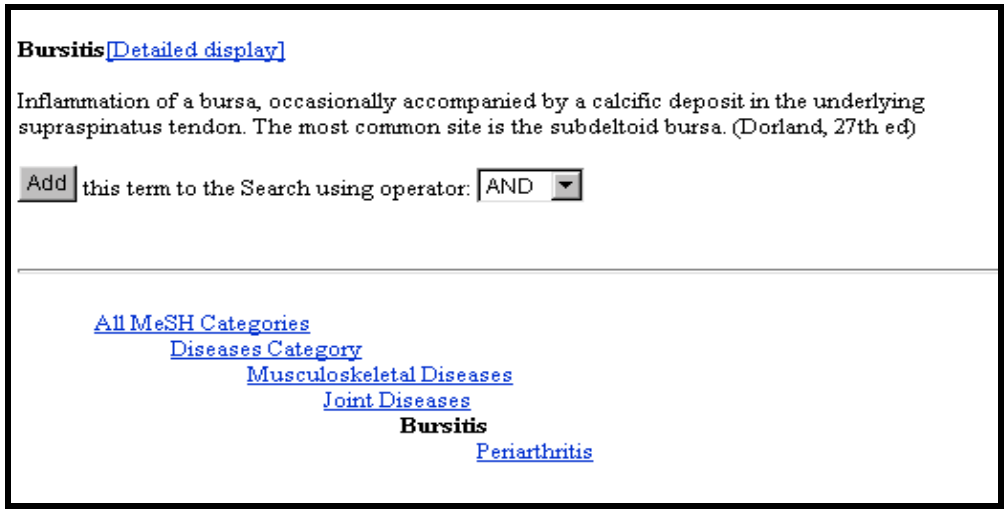


PubMed brings you to this MeSH Browser screen:

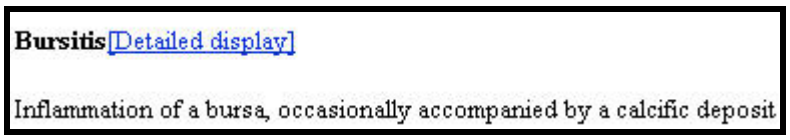
Here is a definition of the concept.

MeSH tree structure is shown.

The browsed term is in boldface.



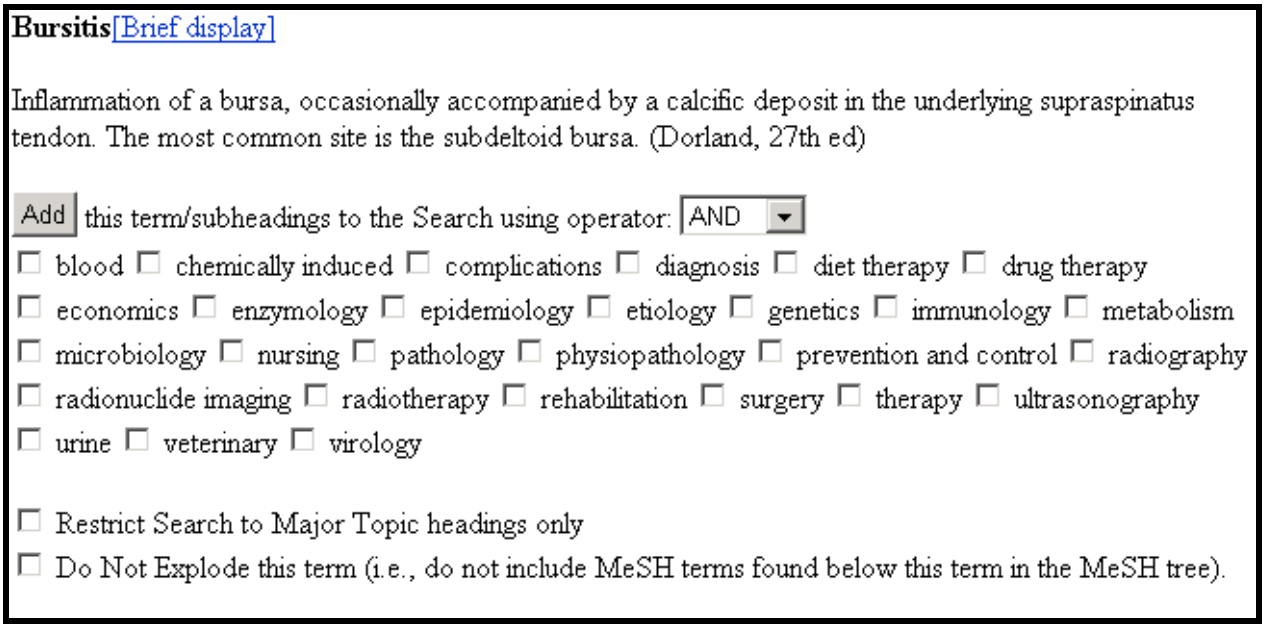
Click on the **Detailed Display** link to the right of the browsed term at the top of the screen as shown below:



This will bring you to another screen providing more information about the browsed term.

- You may search on this term or add this term to an existing strategy. At the same time you may select one or several subheadings, restrict the search to this term as a major point, or select not to explode the MeSH term.

Detailed display screen for Bursitis

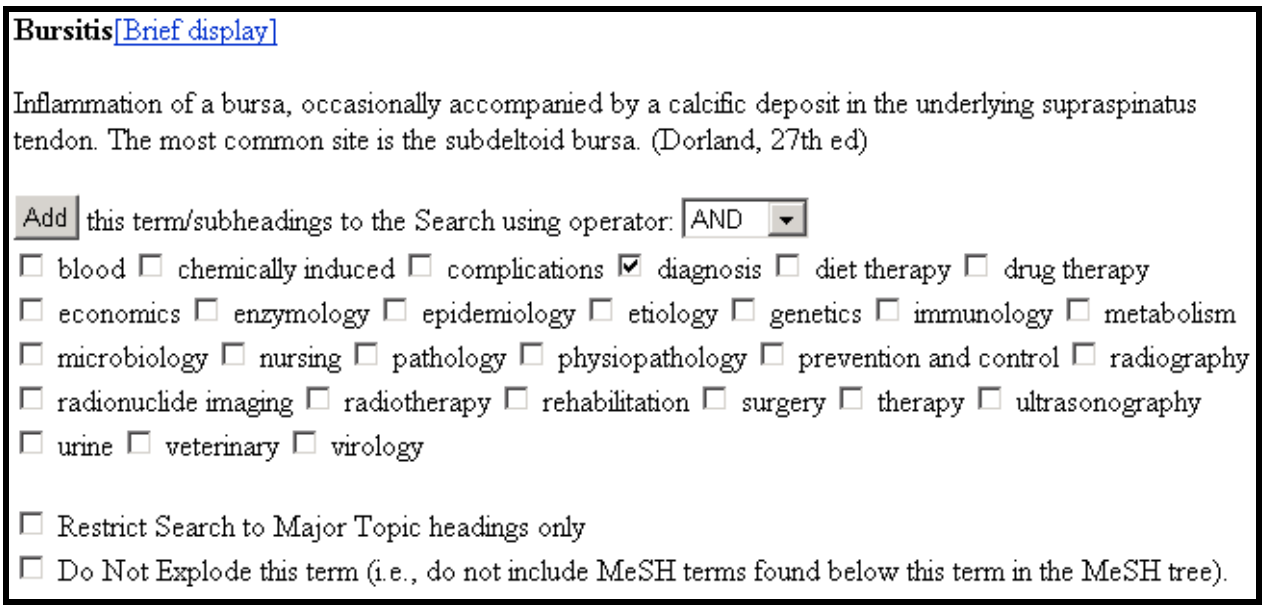


- Use the **Add** button to add the term to your search.
- You can also change the Boolean operator.
- Subheadings that have been attached to the term on current MEDLINE citations are listed.
- You may also restrict to a major point or choose not to explode the term.

Now, let's adjust our search to:

Citations about the *diagnosis* of bursitis

Select the diagnosis subheading from the MeSH browser screen's Detailed Display. Click on **Add** button.



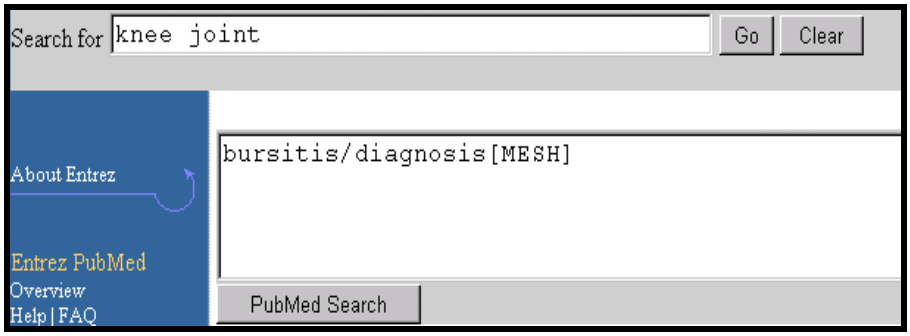
The MeSH Browser current query displays your search strategy. You may also look up another term in the query box.

Now, let's adjust our search and **specifically look for articles discussing the diagnosis of bursitis in the knee joint**.

Enter **knee joint** in the query box, click **Go**.

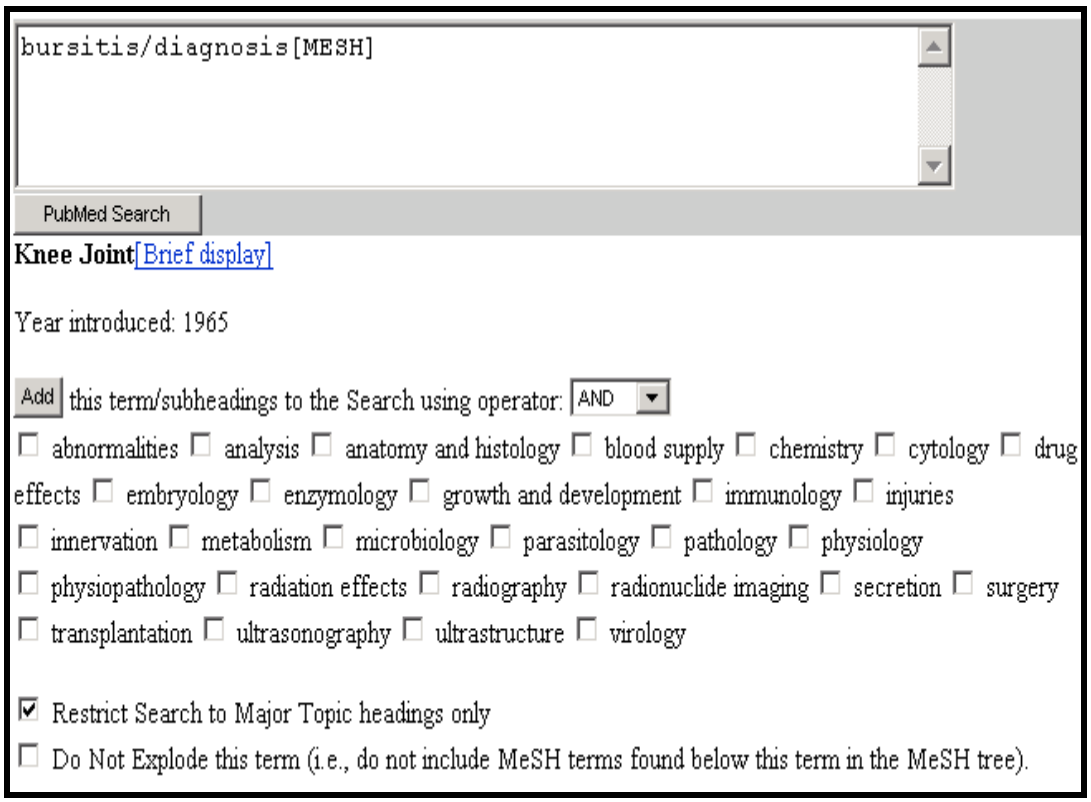
Searching on the next term.

Here's the strategy being built.



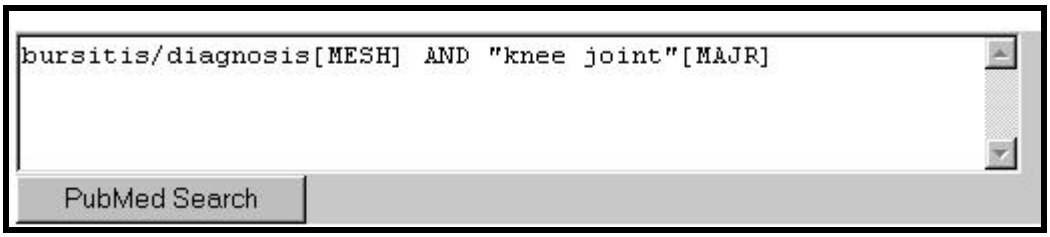
This brings you to the MeSH Browser screen for **Knee Joint**. Next click on the **Detailed Display** link to see more information about this term.

Let's restrict to citations that have been indexed to indicate that the major focus of the article is knee joints and add this term to the strategy we are building.



Click here to restrict to a Major topic.

Once you have checked off **Restrict Search to Major Topic headings only,** click the **Add** button to continue building our strategy:



Click on the **PubMed Search** button to actually run the search in PubMed.

N O T E S

Practice Exercises

Try using the MeSH Browser for searches that require the use of MeSH headings.

1. Find articles discussing the diagnosis of prostrate cancer as the main focus of the article. Then limit to articles entered into PubMed in the last 2 years.

2. Find citations to articles discussing the surgical or drug treatment of osteosarcoma in children. Limit to studies involving the drug, cisplatin. Osteosarcoma should be the main point of the article. Also, limit to English language articles.

3. Find citations to references discussing the economics of community-acquired pneumonia.

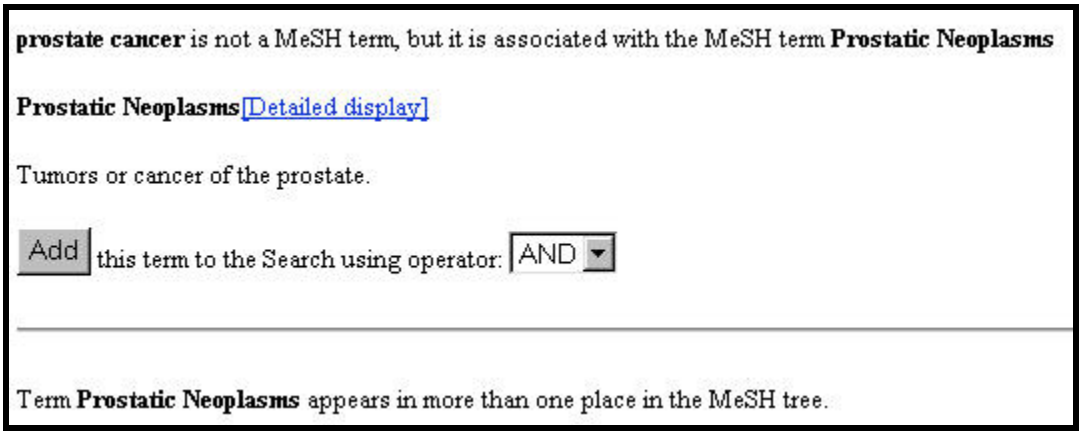
4a. Find information on automatic term mapping in PubMed's online Help.

4b. You need to explain to someone how to import PubMed records into a Bibliographic management program such as EndNote or Reference Manager. Use PubMed's FAQs to find this answer.

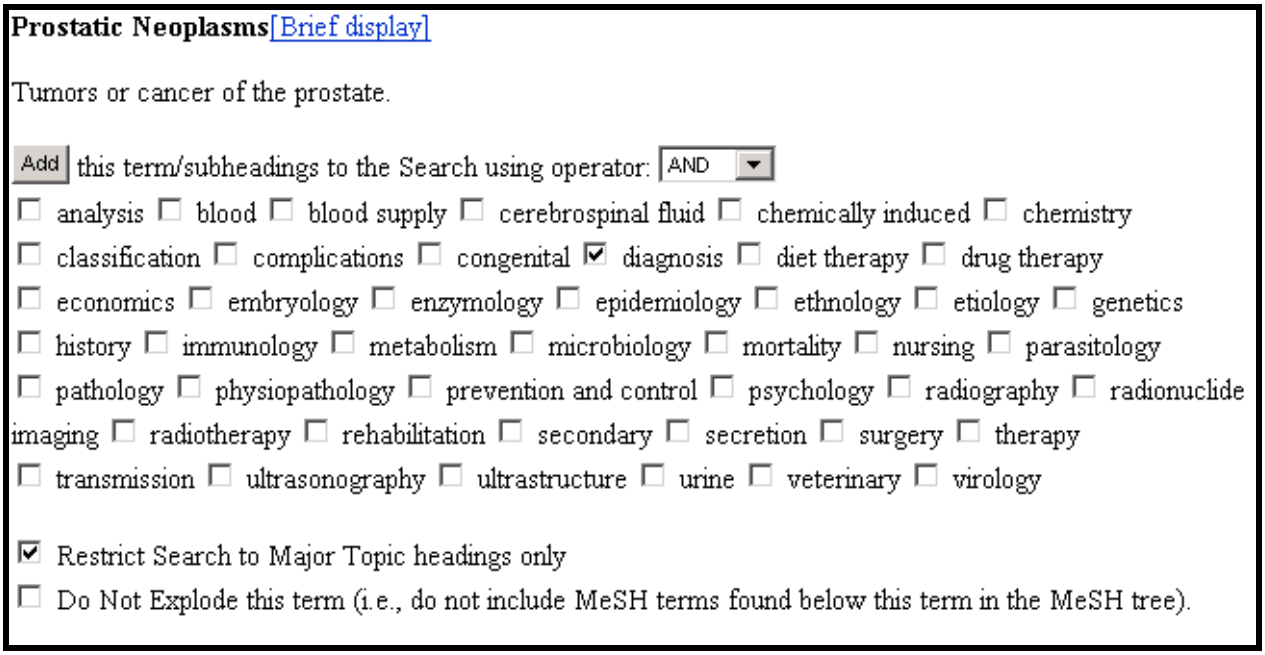
Suggested Answers:

1. Find articles discussing the diagnosis of prostate cancer as the main focus of the article. Then limit to articles entered into PubMed in the last 2 years.

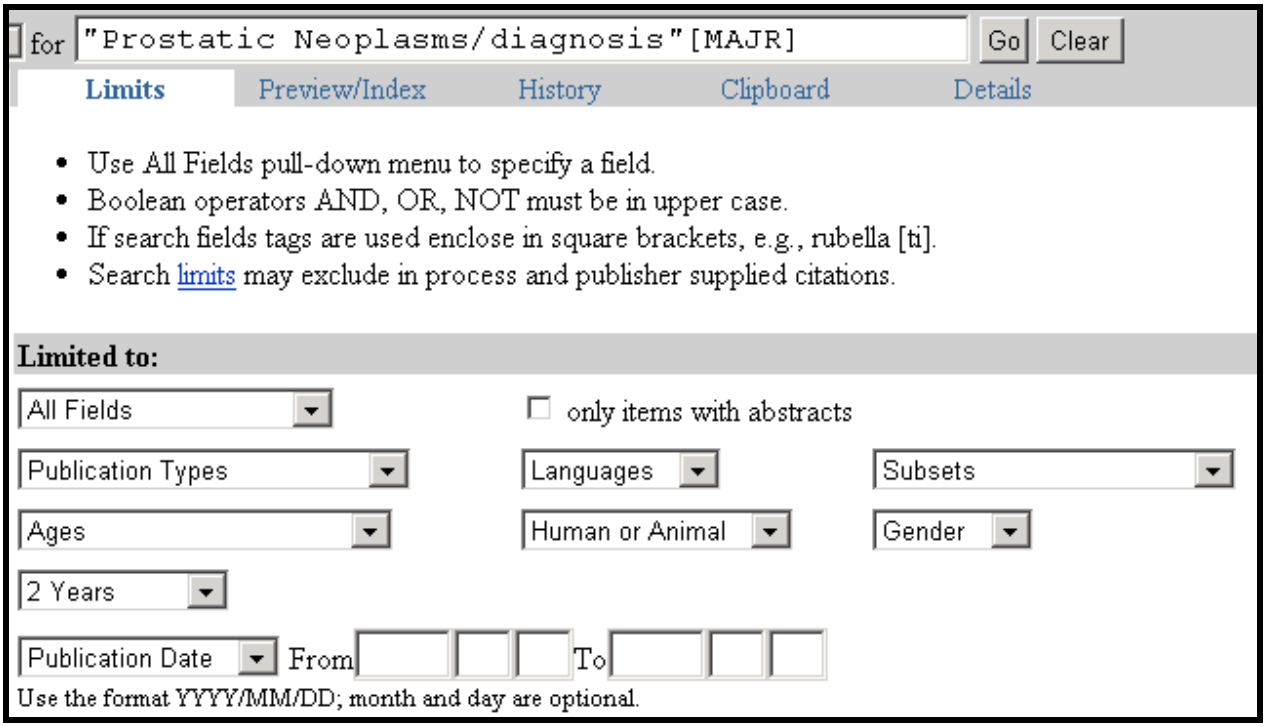
MeSH Browser screen:



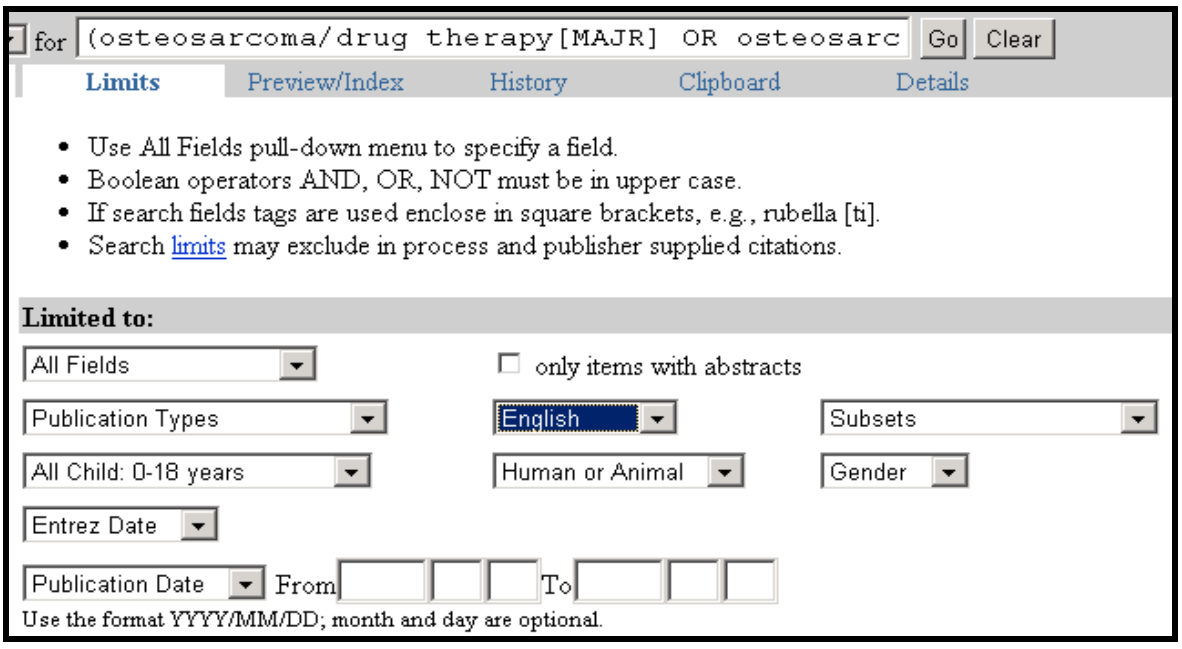
Choosing diagnosis subheading and restricting to major:

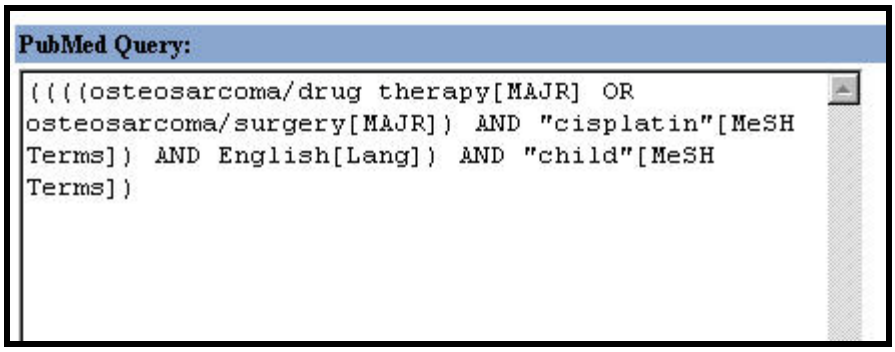


Returned to PubMed with our search strategy built within the MeSH Browser. Now, restrict to those citations entered into the database in the last 2 years:



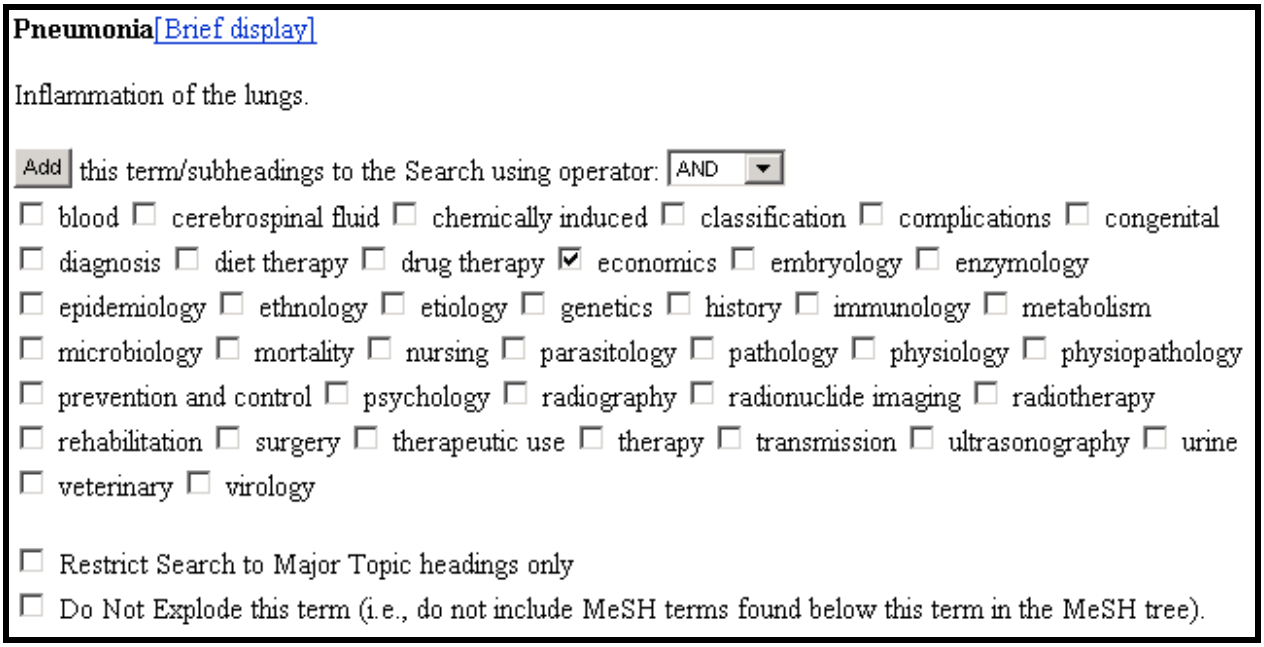
2. Find citations to articles discussing the surgical or drug treatment of osteosarcoma in children. Limit to studies involving the drug, cisplatin. Osteosarcoma should be the main point of the article. Also, limit to English language articles.



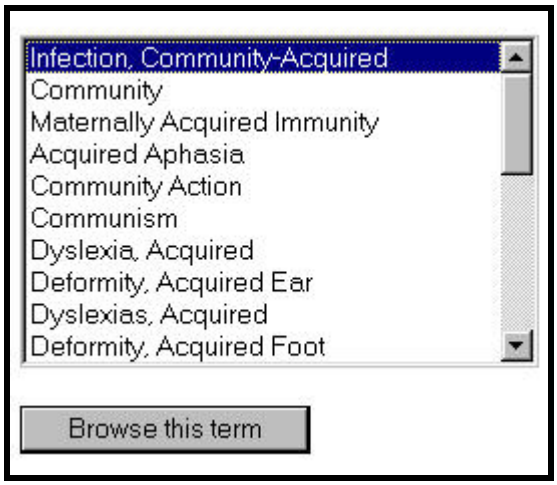


3. Find citations to references discussing the economics of community-acquired pneumonia.

Selecting the subheading of economics to attach to the MeSH heading, pneumonia from the Detailed display in the MeSH Browser.



Next, the MeSH Browser does not find an exact match for community acquired but leads us to this list of available terms. The term, ***Infection, Community-Acquired Infection*** *is Added to our strategy and returned to PubMed.*



4a. Find information on automatic term mapping in PubMed's online Help.

Click on **Help** on PubMed's sidebar.
Click on **Automatic Term Mapping** under **PubMed Searching**.

4b. You need to explain to someone how to import PubMed records into a bibliographic management program such as EndNote or Reference Manager. Use PubMed's FAQs to find this answer.

1. Click on **FAQ** on PubMed's sidebar.
2. Click on **How can I import citations into my reference manager program?**

A quick way to locate information on a Web page is to use the **Find** (in Page) feature under the **Edit** menu of your Web browser.

N O T E S

Cubby

Although this workbook provides instructions on Registering for the Cubby and what to do if you've forgotten or want to change your Cubby Password, these procedures are not discussed during class time.

The Cubby currently has three functions:

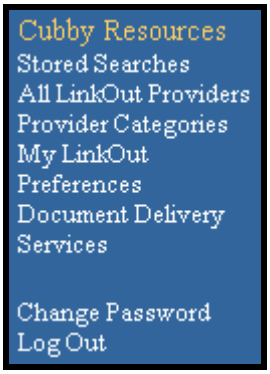
- The Cubby stores searches that can be updated at any time from any computer (to check for new items since you last checked), and;
- The Cubby stores LinkOut preferences that specify which LinkOut providers you want displayed in PubMed.
- The Cubby stores Document Delivery Services preferences.

To use the Cubby, you Web browser must be set to accept cookies.

Getting to the Cubby

- Click on Cubby on the PubMed Sidebar.

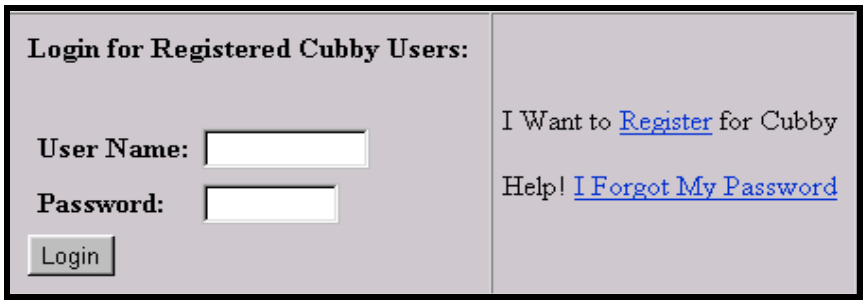
Cubby Sidebar



- Stored Searches provides a link to your Cubby Stored Searches.
  All LinkOut Providers lists each LinkOut provider in alphabetical order.
- Provider Categories lists LinkOut providers organized by subject categories.
- The My LinkOut Preferences page displays the LinkOut preferences you have selected.
- The Change Password page lets you change your password.
- Log Out logs you out of the Cubby. Your login is good for 12 hours, unless you log out

Registering for the Cubby

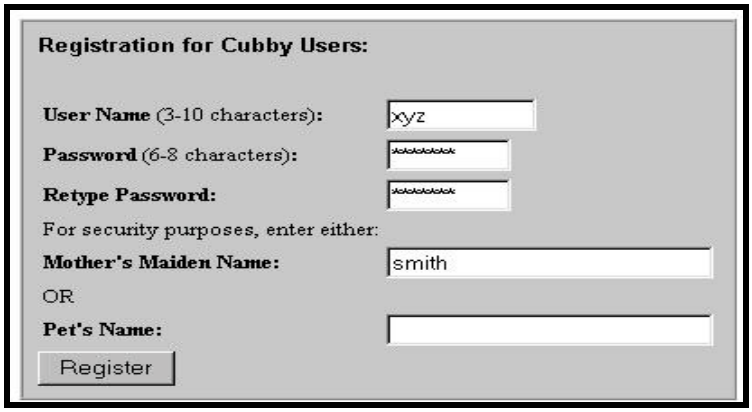
- Click Cubby from the PubMed sidebar.
- Then click "I Want to Register for Cubby."



*Click on **Register** to go to the Cubby Registration Screen*

- Provide (make-up) the following information, then click **Register**:
    1. User Name (3-10 characters)
    2. Password (6-8 characters)
    3. Mother's Maiden name, or Pet's Name (in the event you forget your password.)

User Name, Password and security word are all case-sensitive. Make sure you enter these in a manner that you can easily remember.



*Enter **User Name** and **Password**.*

*Retype **Password.***

*Enter **Mother's Maiden Name** or **Pet's Name**.*

*Click **Register**.*

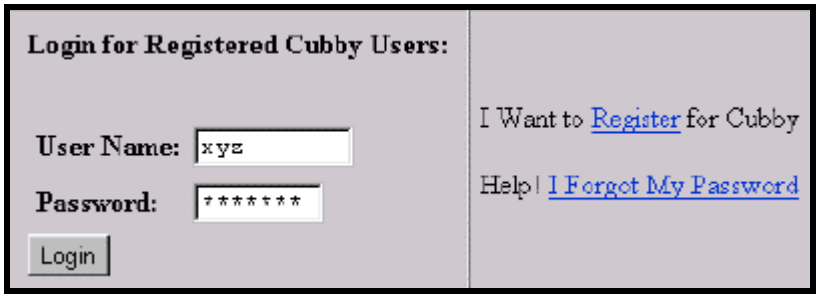
Save this information so that you can refer to it later. NLM does not store your User Names or Passwords.

Logging In

You must login to access the Cubby or use Cubby-supported features (e.g., customized LinkOut displays). This login will remain active for 12 hours. If you've already registered, type your User Name and Password and click **Login**.

*Enter **User Name** and **Password.***

*Click **Login.***



Forgot Your Password?

If you've forgotten your password, click "Help! **I Forgot My Password**."

- In the Password Forgotten Box, enter your User Name and click **Lookup.**

*Enter your **User Name.***

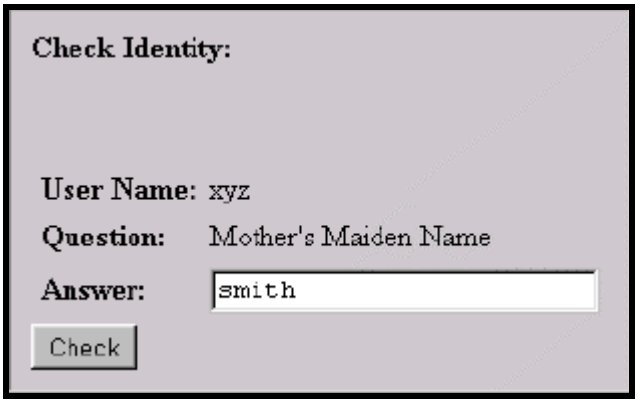
*Click **Lookup.***

- Enter either your Mother's maiden name or your Pet's name. Click **Check**.

- Once this information is verified, the Cubby assigns you a ***new*** Password. Make a note of your new Password as you will need it to Login to the Cubby, and you will also need it if you want to change your password to something you can easily remember.

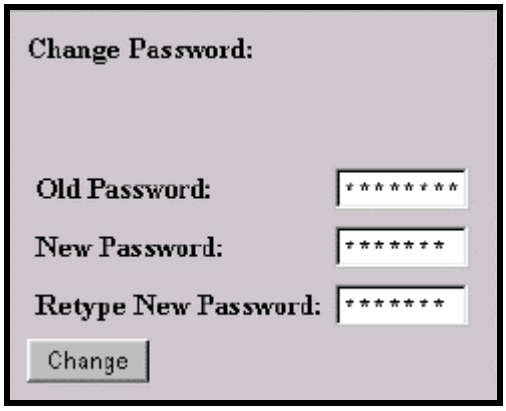
*Enter your **Answer.***

*Click **Check.***



Changing Your Password

Select **Change Password** from the Cubby sidebar and enter your old password and new password, then click **Change**.



*Enter **Old Password**.*

*Enter **New Password**.*

*Retype **New Password**.*

*Click **Change**.*

Log Out

Click **Log Out** from the Cubby sidebar to Log Out. Your Login will remain active for 12 hours, unless you Log Out.

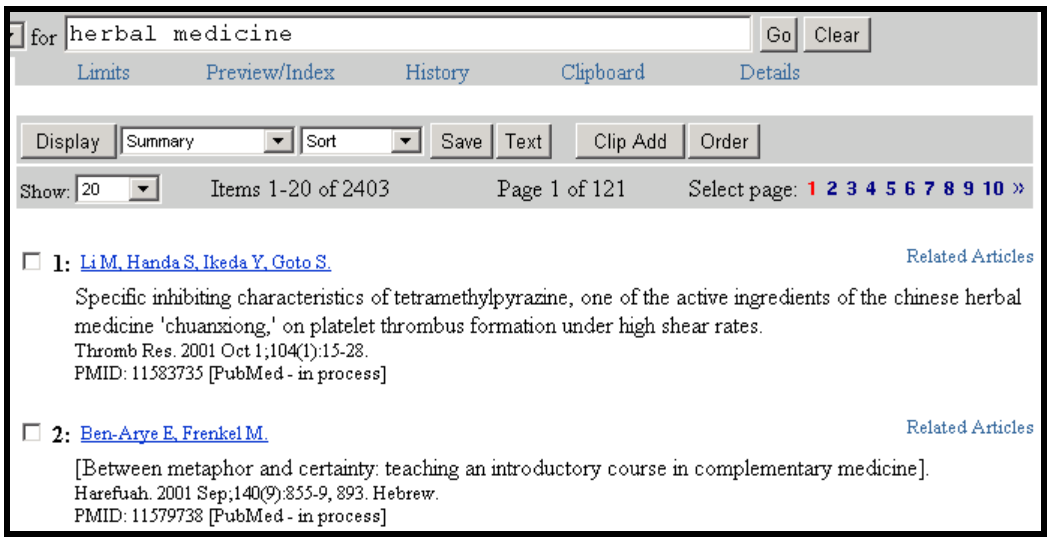
Cubby Stored Searches

Use Cubby to store a new search, see a list of your stored searches, check for new items retrieved by a stored search since you last checked, or delete a stored search.

How to Store a Search

- From anywhere in PubMed, run or Preview your search.
- You can store any search using terms and limits necessary for your topic.

*Enter **herbal medicine** in the query box and click **Go**.*



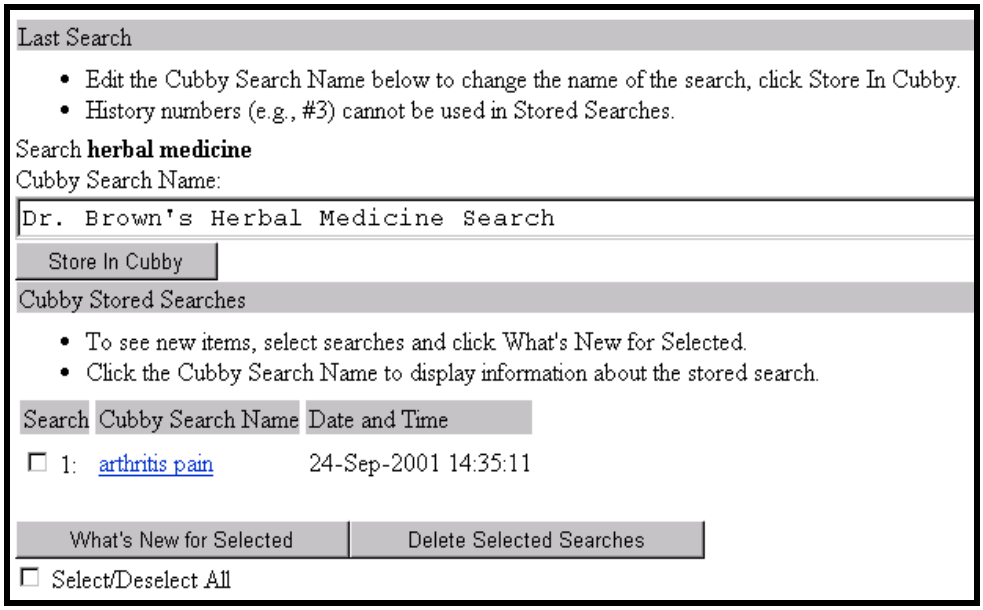
- Click **Cubby** on the sidebar.
- Last Search displays the last search query, including limits, if used.
- Edit the name of the search to something manageable yet meaningful, if necessary.

Last Search *displays your last query, herbal medicine.*

Edit the ***Cubby Search Name****, if necessary.*

Click ***Store in Cubby.***

Previously stored search(es).



You can store up to 100 searches in a single Cubby account. You can have as many Cubby accounts as you need.

The Cubby will let you store multiple searches with identical the name. Be sure to name each of your Cubby stored searches uniquely.

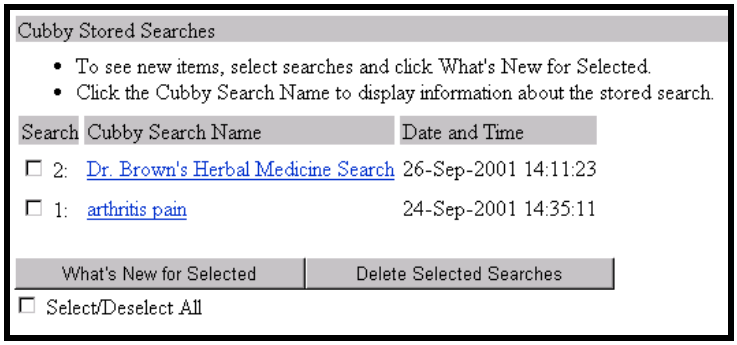
Links to "Related Articles" and History numbers (e.g., #3) cannot be stored as part of Cubby Stored Searches. Also, dates or date ranges are not recommended in your strategies. See the What's New Strategy (discussed later in this workbook) for more information on date ranges.

Stored Search Information

- Stored searches are numbered and listed in descending order according to the date and time they were originally stored.

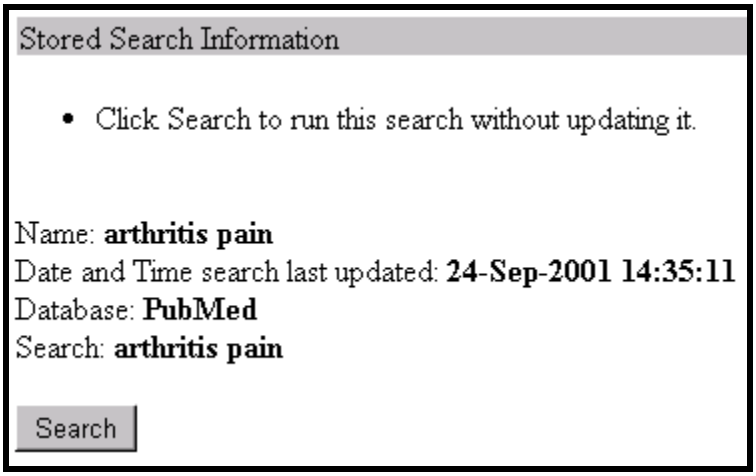
- To review information about a stored search, click on the search name.

*Click on a **Cubby Search Name** to see search information.*



- Stored Search Information includes the search name, date and time last updated, database searched, search terms, as well as fields and limits when applicable.

- Click the **Search** button to run the search without update limits. This will not change the date and time the search was last updated.



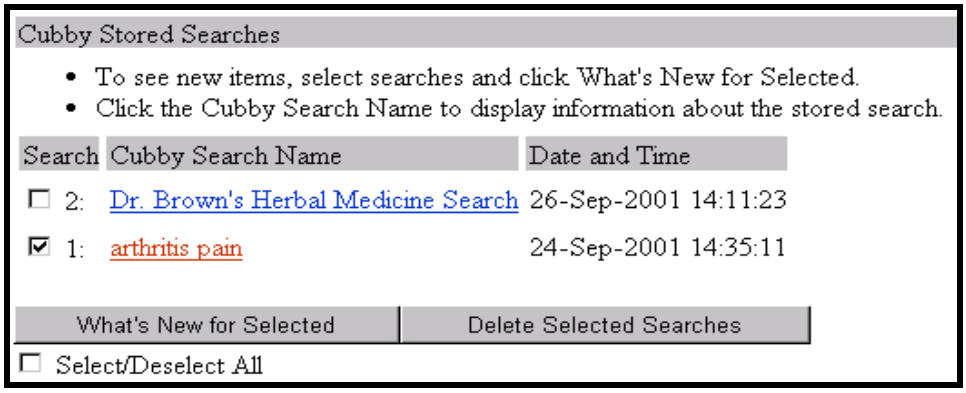
Updating Cubby Stored Searches

It is easy to check for new items since your last update.

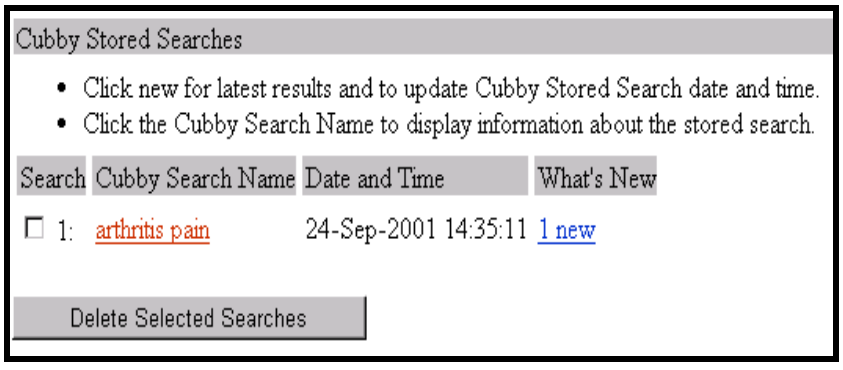
- Select the stored search(es) you want to update by clicking the check box(es) next to the Cubby Search Name.
- To select all searches click the "Select/Deselect All" check box.
- Click the **What's New for Selected** button.

*Select the **arthritis pain** search.*

*Click the **What's New for Selected** button.*



- The Cubby displays the list of searches you selected along with an additional column indicating the number of new items retrieved since the last time you checked.
- If there are no new items, the Cubby displays "0 new."
- Click **# new** to link to the new items.
- Clicking on this link displays the new items, and updates the stored search in the Cubby with the new date and time.
- If you do not click **# new**, the search, date, and time are not updated.



*Click on **1 new** to Link to the new item(s) and update the stored search date and time.*

The **Details** button will not display on the results screen after updating a Cubby stored search. This is because the update strategy for your search actually incorporates three separate strategies and Details can only display a single strategy at a time.

The What's New strategies used for the Cubby feature are detailed in PubMed's Help.

Deleting Stored Searches

Select the stored search by clicking the check box next to the Cubby Search Name, and click "Delete Selected Searches." You can select and delete multiple searches at one time.

LinkOut Preferences

- LinkOut is a service that provides links from items retrieved from Entrez databases to information providers.
- In PubMed, the link to the citation provider displays on the Abstract or Citation display formats, when available. The citation provider is the provider, usually the publisher, who submits the citation to NLM electronically.
- All other links to providers from a retrieved item display on the LinkOut display page.
- Use Cubby LinkOut Preferences to customize which links display.
- Whenever you log into the Cubby, PubMed will display LinkOut providers according to your specifications.

Setting your Preferences

You can change how provider links are displayed either by adding an Icon or Hiding a link from LinkOut.

- ***Add Icon*:** Use the Add Icon option to display links (as icons) to providers' web sites on the fuller PubMed display formats (e.g., Abstract, Citation). The default is for only the citation provider icons to be displayed with these formats.
- ***Hide from LinkOut***: Use the Hide from LinkOut option to hide links to providers' web sites on the LinkOut display format. The default is for all the provider's links to display on the LinkOut display format.

The next few pages will show you how to set your LinkOut preferences. We will demonstrate how to set LinkOut preferences using **Provider Categories** available from the Cubby sidebar. You can also set your preferences using **All LinkOut Providers** and **My LinkOut Preferences** using the same procedures explained below.

Your Linkout preferences are only in effect when you are logged into the Cubby. Your logon will remain active for 12 hours unless you log out of Cubby.

To add an icon to the fuller PubMed display formats, choose, for example, **Provider Categories** from the Cubby sidebar.

- **Provider Categories** lists the categories (e.g., LITERATURE, MEDICAL, MOLECULAR BIOLOGY DATABASES) of LinkOut providers. Within each category are Subject Types. For the LITERATURE category, the Subject Types are aggregators, document delivery, libraries, and publishers/providers.
- You can choose to display (or hide) all the providers in a subject type.

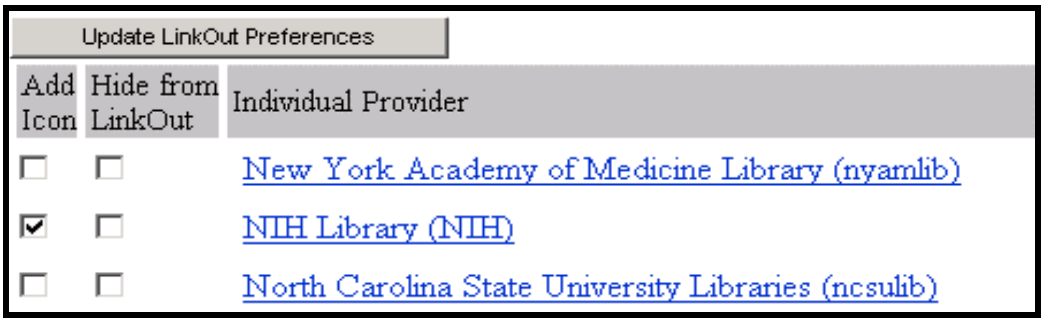
Current LinkOut Provider Categories include Education, Literature, Medical, Molecular Biology Databases, Research Materials, Researchers, and Tools.

*Click on **libraries** to see the providers under this category.*

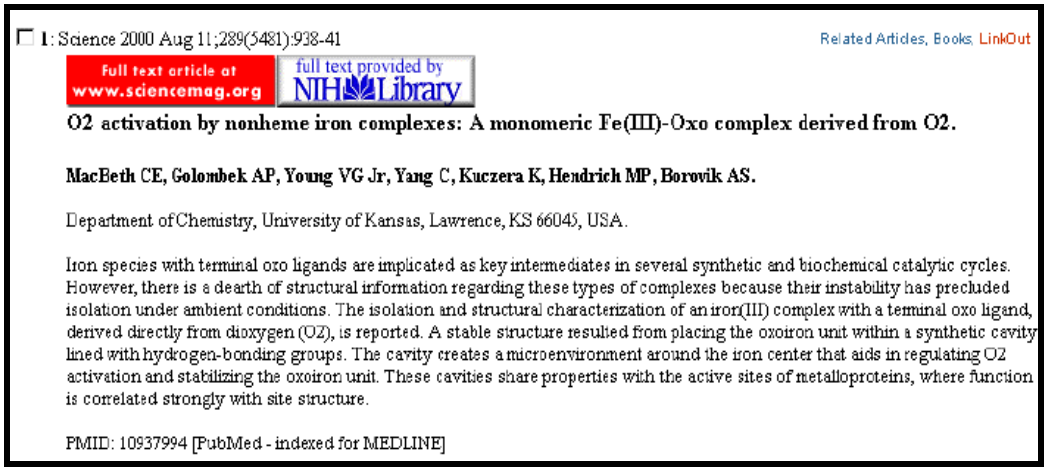
- Alternatively, you can view the individual providers in a subject type by clicking on subject type name.
- Click on libraries under LITERATURE to see the providers under this subject type.
- Select Add Icon for the NIH Library. Click **Update LinkOut Preferences**.

Displays the current list of Library LinkOut providers.

*Select **Add Icon** for the NIH Library. Click on the **Update LinkOut Preferences** button.*



Here is an example citation showing the NIH Library icon (in addition to the default citation provider icon) on the Abstract display format.



All LinkOut Providers

Click on **All LinkOut Providers** from the Cubby sidebar to see all the LinkOut providers in alphabetical order.

- Click the Add Icon check box if you want an icon for that provider to show up on the fuller display formats.
- Click the Hide from LinkOut check box if you want to remove the link for that provider on the LinkOut display format.
- Clicking on a box that has a check in it removes the check and deselects that option.
- Click **Update LinkOut Preferences** (at the top and bottom of the screen) to save any changes.
- Click **View** (at the top of the screen) to display new LinkOut providers since the last time you checked by clicking the **View** button.

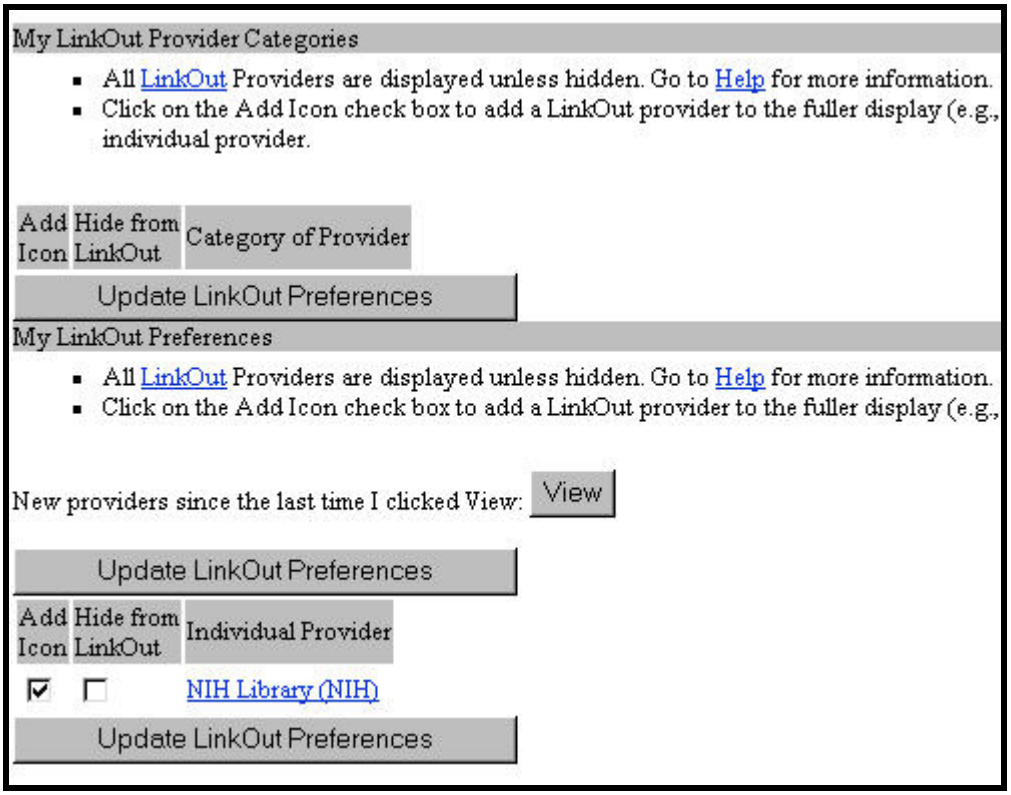
My LinkOut Preferences

Click on **My LinkOut Preferences** from the Cubby sidebar to see how your LinkOut Preferences are set.

- Click **Update LinkOut Preferences** to save any changes.
- Click **View** to display new LinkOut providers since the last time you checked.

*Click the **View** button to see new providers.*

The NIH Library Add Icon selection is shown.



LinkOut Preference Tips:

- ✓ When you select preferences from a list, the selection will not be reflected in other provider lists. For example, if you chose to hide all library LinkOut providers, there will not be a check in the Hide check box for all the libraries on the All Providers list even though they will be hidden. Always use My LinkOut Preferences to see how your preferences are set.
- ✓ The category and individual providers are in separate sections on the My LinkOut Preferences page. If you make changes on the My LinkOut Preferences page, be sure to click **Update LinkOut Preferences** for that specific section.
- ✓ Your LinkOut preferences are in effect only when you are logged into the Cubby. Your Login will remain active for 12 hours.

Document Delivery Services

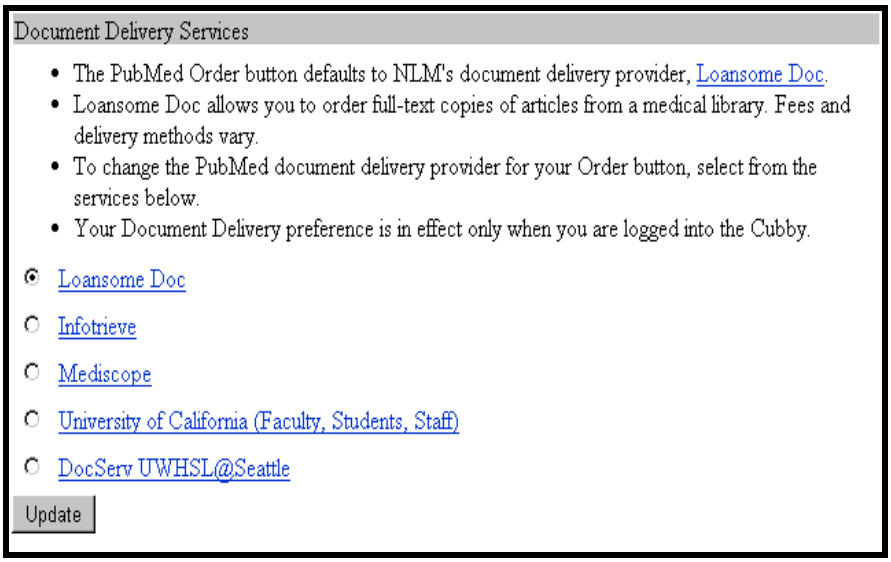
- Use Cubby Document Delivery Services to customize the document delivery service you link to when you click the **Order** button.

- Whenever you log into the Cubby and then use the PubMed **Order** button, you will be linked to the document delivery service you specified.

Setting your Services

The default document delivery service for PubMed is Loansome Doc. You can change this by clicking on **Document Delivery Services** on the Cubby sidebar.

*Loansome Doc is the default document delivery service. To change this, select another service and click the **Update** button.*



N O T E S

Search Field Descriptions

Although this workbook provides instructions and practice exercises for using all search field abbreviations, only sections on **Search Rules and Syntax, Search Field Abbreviations, MeSH headings [MH],** and **Subheadings [SH]** are discussed during class time. Practice exercises are not done during class time.

- If you prefer not to use the pull-down menus to select search fields, you may enter a Boolean search statement directly in the query box when building your search.

Search Rules and Syntax

- The Boolean operators AND, OR, NOT must be entered in uppercase letters.
- Boolean connectors are processed left to right.
- Nesting of search terms is possible. To change the order in which terms are processed, enclose the concept(s) with parentheses. The terms inside the set of parentheses will be processed as a unit and then incorporated into the overall strategy. **This is called nesting.**

Example: shoulder joint [mh] AND (baseball [mh] OR hockey [mh]) AND arthroscopy [mh]

Search Field Abbreviations

- Terms may be qualified using PubMed's search field tags. A list of the available field names, abbreviations, and brief field descriptions may be found in the PubMed Help under Search Field Descriptions and Tags.

- Each search term should be followed with the appropriate search field tag, which indicates which field will be searched. The search field tag must follow the term. You cannot prequalify a term.

Correct entry:	aromatherapy [mh]
Incorrect entry:	[mh] aromatherapy

- Search field tags must be enclosed in **square brackets.**
- Case and spacing do not matter: ice [mh] = Ice [mh] = ICE [MH]

MeSH headings [MH]

- MeSH headings are qualified using the search field tags:

  [mh] to search a MeSH heading
  [majr] to search a MeSH heading which is a major topic of an article

- PubMed **automatically** searches the MeSH headings as well as the more specific terms underneath that heading in the MeSH hierarchy; i.e., **the term is exploded**.

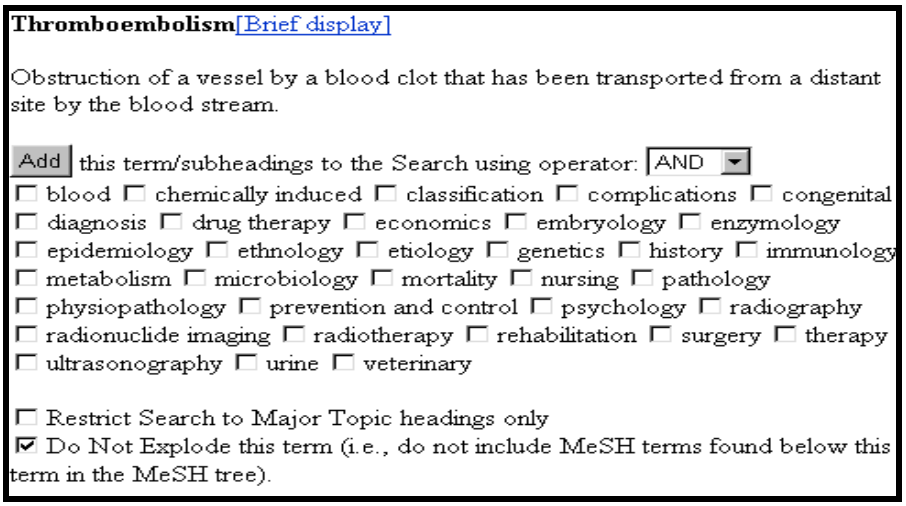
- Turning off automatic explosion of MeSH headings:

Use one of the following tags: [mh:noexp] or [majr:noexp]

Example: thromboembolism [mh:noexp]
thromboembolism [majr:noexp]

Alternatively, consider using the Do not explode selection from the Detailed Display in the MeSH Browser.

Click here



Searching with MeSH headings will exclude in process and publisher-supplied citations, as they are not indexed with MeSH.

Subheadings [SH]

- You can directly attach subheadings to MeSH headings using the format MeSH heading/subheading.

- Two letter abbreviations for subheadings or the full subheading name may be used.

Examples:

thromboembolism/pc [mh]
thromboembolism/prevention and control [mh]
toes/in [majr]
toes/injuries [majr]

- Only one subheading may be directly attached to a MeSH heading at a time. If you wish to attach multiple subheadings you must combine them with the OR connector or use the MeSH Browser.

- Thromboembolism/pc [majr] OR thromboembolism/di [majr]

- For a MeSH/subheading combination, PubMed always explodes the MeSH term and also explodes the subheading, if it is explodable. In the example below, the explodable subheading (therapy) or one of its indentions (e.g., diet therapy) will be directly attached to the MeSH term (hypertension) or one of its indentions (hypertension, malignant).

Example: hypertension/th

Hypertension with its indentions:

Hypertension
Hypertension, Malignant
Hypertensive Encephalopathy
Hypertension, Portal
Esophageal and Gastric Varices
Hypertension, Pulmonary
Persistent Fetal Circulation Syndrome
Hypertension, Renal
Hypertension, Renovascular
Nephrosclerosis

Therapy subheading with its indentions:

therapy
diet therapy
drug therapy
nursing
prevention and control
radiotherapy
rehabilitation
surgery
transplantation

Sample of citation results showing a portion of the MeSH terms assigned to three citations:

Citation 1:
Platelet eicosanoids and the effect of captopril in blood pressure regulation.

- Fatty Acids, Unsaturated/metabolism
- Fatty Acids, Unsaturated/biosynthesis
- Hypertension/drug therapy
- Lipoxygenase/metabolism

Citation 2:
Hypertension in Pregnancy

- Hypertension/drug therapy*
- Hypertension/diagnosis*
- Pregnancy

Citation 3:
Salt: blood pressure, the kidney, and other harmful effects.

- Hypertension, Renal/metabolism
- Hypertension, Renal/etiology*
- Hypertension, Renal/diet therapy
- Rats
- Sodium Chloride/urine

A list of current subheadings and subheading explosions appears in PubMed's online Help (under References, see Subheadings and Families of Subheading Explosions).

To **turn off both** the MeSH heading explosion and subheading explosion, you would enter:

Hypertension/th [mh:noexp]

This turns off the explosion in ***both*** parts, searching for only the subheading therapy attached directly to only the MeSH term hypertension.

- You may also choose to "free-float" a subheading with a MeSH heading using the Boolean AND and the subheading field tag of [sh]. This is typically done if you wish to directly attach a subheading with a MeSH heading that is not an approved combination.

Example:

breast neoplasms [mh] AND trends [sh]

- To **turn off the subheading automatic explosion**, use the tag [sh:noexp]. You may *only* do this when "free-floating" a subheading.

Truncation Symbol

- The asterisk (*) is the truncation symbol.

There is no single character truncation symbol in PubMed.

Text Words [TW]

- Terms that are qualified with the Text Words [tw] field tag will be searched for in the following fields:

  - Title
  - Abstract
  - Numbers from the Title and Abstract
  - MeSH headings and Subheading (also fragments and phrases from these 2 fields)
  - Chemical Names of Substances
  - Secondary Source Identifier (The SI field identifies other data sources, databanks and accession numbers of molecular sequences discussed in MEDLINE articles.)
  - Personal Name as Subject

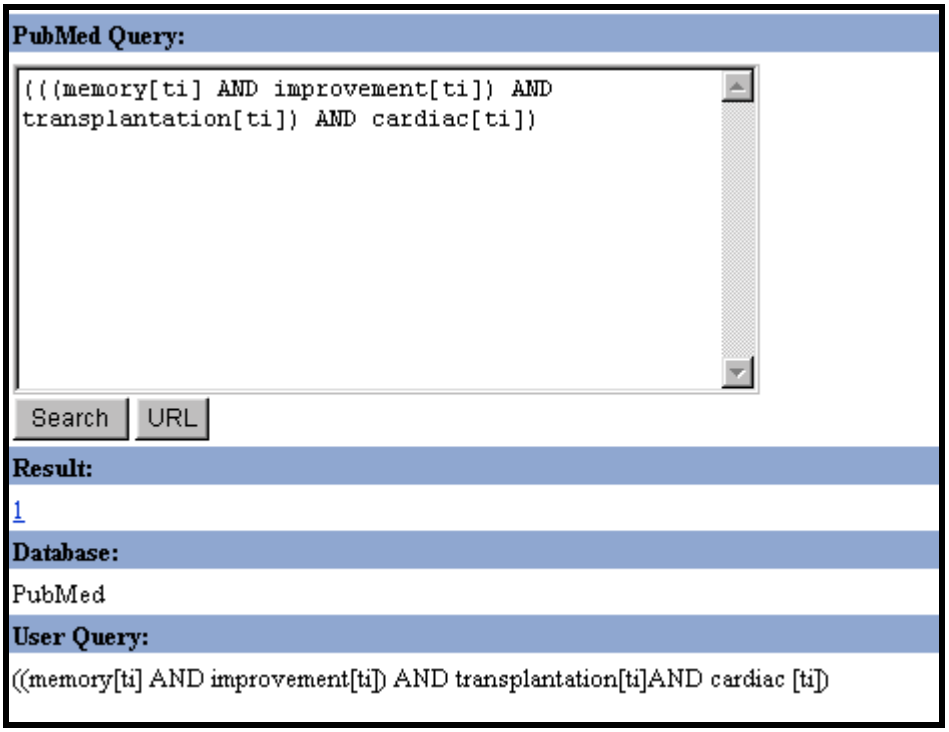
Title Word Searching [TI]

- Enter significant terms (numbers, too) from the title of an article.
- Each word must be followed by the [TI] search field tag.
- Words should be combined with the AND operator.

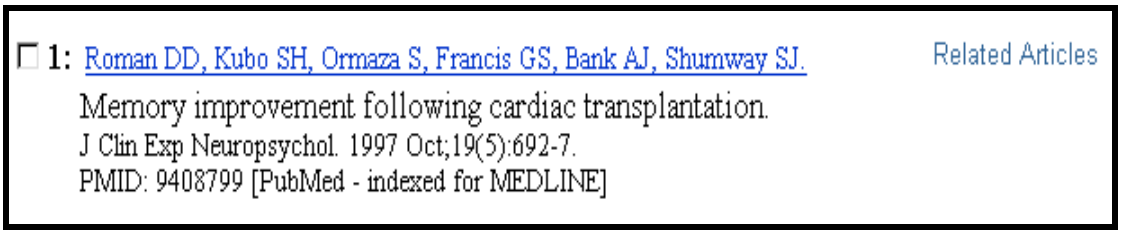
Example: *I'm looking for an article. The title is "Memory improvement following cardiac transplantation".*

Query box: memory [ti] AND improvement [ti] AND cardiac [ti] AND transplantation [ti]

Details:

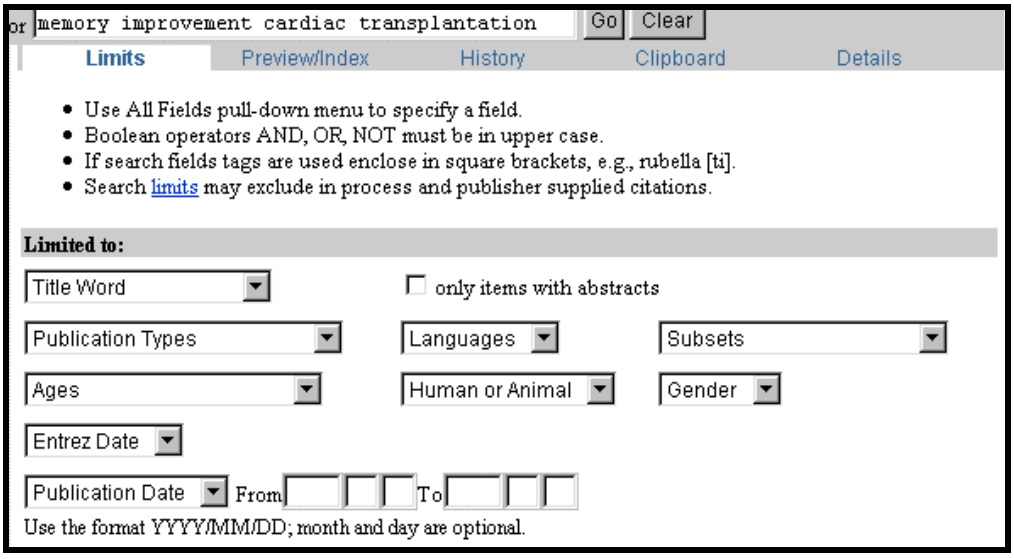


Result:



Search Tip:

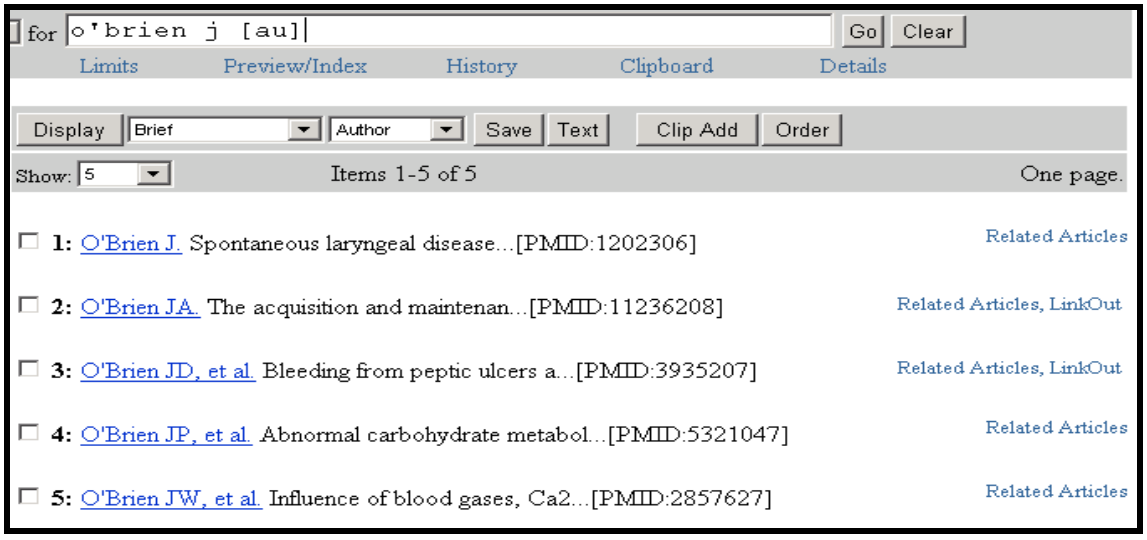
Alternatively, consider using the Title Word selection from the Fields pull-down menu in Limits. When using this method, you do not have to tag each title word.



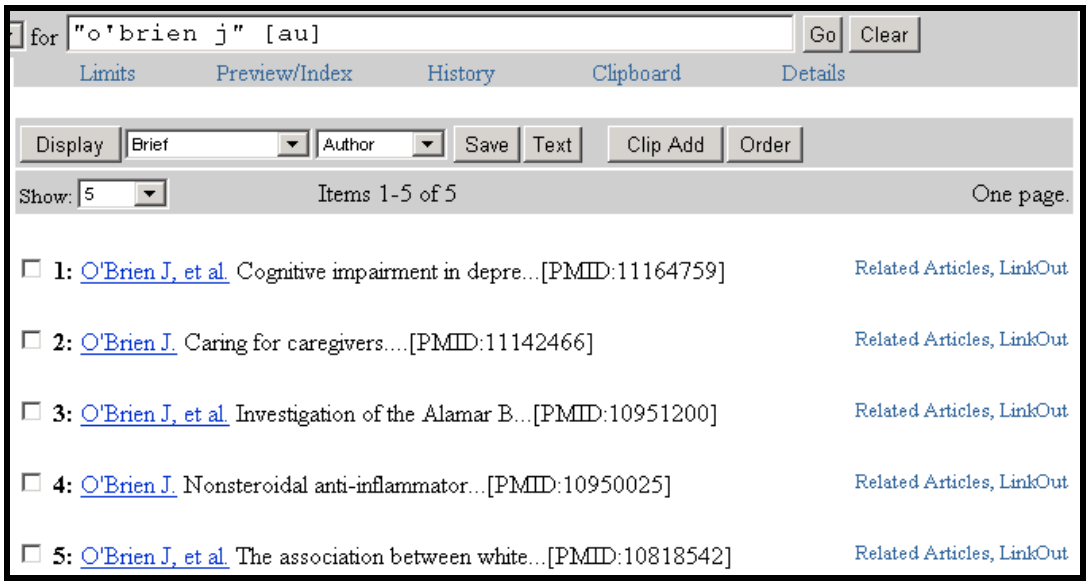
Author Searching [AU]

- Use Last Name Initials format with the [au] tag. Example: O'Brien J [au]
- PubMed automatically truncates the author's name to account for varying initials.

Example:



- To **turn off automatic truncation of an author's name,** surround the author's name with double quotes and use the [au] search tag.



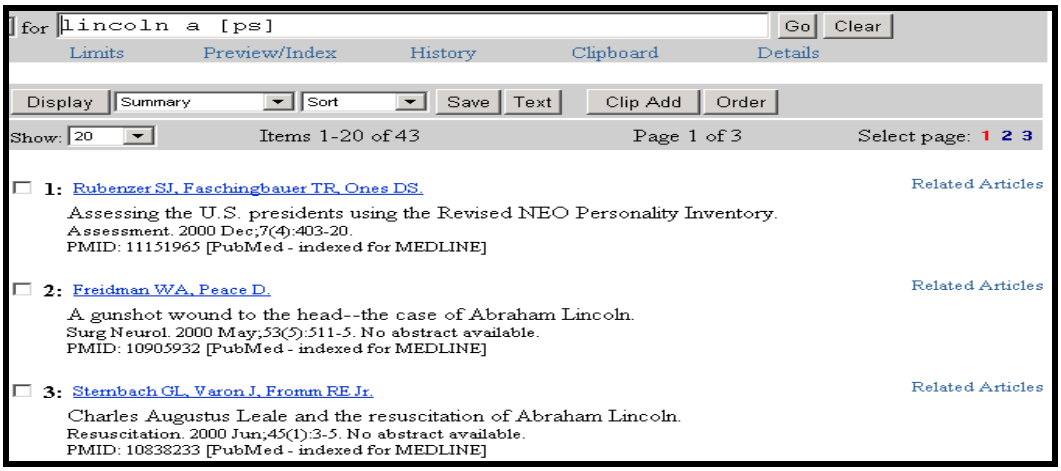
Personal Name as Subject [PS]

- Use the [ps] tag to search for citations to articles about a named individual. The name is searched in the same format as for authors.

Example: Lincoln a [ps]

The Personal Name as Subject field is *not* available from the Search Field pull-down menu in Limits.

Example:



Journal Name [TA]

- Search by full Journal name, MEDLINE abbreviation or ISSN.

  Examples: Journal of Biological Chemistry [ta]
  J Biol Chem [ta]
  0021-9258 [ta]

Any single-word journal title or MEDLINE journal title abbreviation should be qualified with [ta].

Languages [LA]

- First three letters of language may be used as abbreviation when searching. (There are a few exceptions. Example: JPN for Japanese)

  Language values may also be spelled out.

  Examples: common cold [mh] AND chi [la]
  common cold [mh] AND chinese [la]
  common cold [mh] AND por [la]
  common cold [mh] AND Portuguese [la]

Remember, the following languages are available from the Languages pull-down menu in Limits:

Entrez Date [EDAT]

- The Entrez Date field contains the date that a record was initially added to PubMed, in the format yyyy/mm/dd [edat], e.g.,

  1999/07/10 [edat]

- Month and day are optional:

  1999 [edat]
  1999/07 [edat]

Be aware that the Entrez Date will remain unchanged and is not updated to reflect the date a publisher-supplied record is elevated to in process or when an in process record is elevated to MEDLINE.

Remember the Entrez Date pull-down menus in Limits.

Publication Date [DP]

- The date that the article was published in the format of YYYY/MM/DD [dp]. Use the [dp] tag.

  1984/10/06 [dp]

- Month and day are optional:

  1984/10 [dp]
  1984 [dp]

Publication Date formats are not standardized from journal to journal.

Date Ranging

- The colon (:) is used between ranging values.
- To search on Publication Date from 1993 to 1997, enter:

  1993:1997 [dp]

- To search on a date, use the format YYYY/MM/DD

Example 1: Search on citations entered into PubMed from Jan 16, 1998 to Feb 13, 1998

1998/01/16:1998/02/13 [edat] where edat is the abbreviation for Entrez Date

Example 2: Search on citations entered into PubMed in January or February 1998

1998/01:1998/02 [edat]

Remember the **Publication Date** fill-in-the-blank selection in Limits.

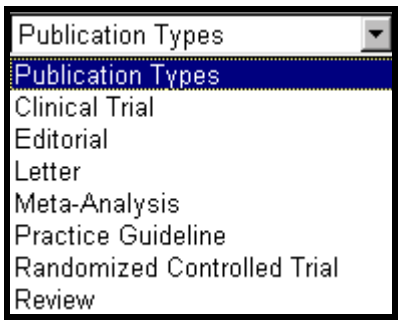
Publication Type [PT]

- Describes the type of material the article represents
- Examples: Twin Study, News, Review, Clinical Trial, Retracted Publication, Letter
- Use the [pt] tag

Example: vascular diseases [majr] AND twin study [pt]

PubMed's Help includes a listing of all available **Publication Type**s.

Remember, the following **Publication Types** are available from the pull-down menu in Limits:



Subset [SB]

- Allows you to limit your search to a particular portion of PubMed
- Available values include:
  - medline [sb]
  - in process [sb]
  - publisher [sb]
  - aids [sb]
  - bioethics [sb]
  - cam [sb]
  - space [sb]
  - tox [sb]
  - medline pmc [sb]
- Use the [sb] tag
- Example: hospice care AND aids [sb]

Remember, you may use the Subset pull-down menu from Limits.

Limiting to published journal indexes

- The following values are available:

Core clinical journals	jsubsetaim
Dental	jsubsetd
Nursing	jsubsetn

Do ***not*** use a field qualifier; just use the search value.

Example: baseball AND jsubsetaim

Remember, you may use the **Subset** pull-down menu from Limits to limit to these values.

Secondary Source Identifier [SI]

- Identifies a secondary source that supplies information, e.g., other data sources, databanks and accession numbers of molecular sequences.
- The field is composed of a source followed by a slash followed by an accession number.

  Example: GENBANK/AF113832 [si]

Unique Identifier Searching

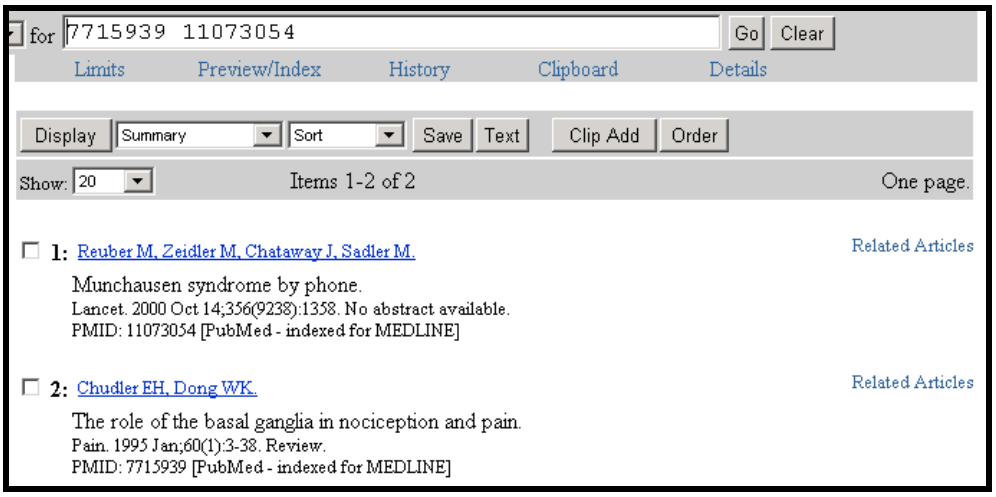
- To search for the PubMed Unique Identifier (PMID), type in the number with or without the search field qualifier [uid].

  Example: 11073054

- You can search for several unique identifier numbers by entering each number in the query box separated by a space, PubMed will OR the terms together. *Do **not*** enter the OR connector.

Unique Identifiers as entered in the query box.

PubMed finds the 2 citations.



- To search an **Unique Identifier in combination with other terms** you ***must*** use the search field tag, [uid].

  Example:

  Smith [au] AND (10403340 [uid] OR vaccines [mh]).

Grant Number Searching [AD]

- Grant number information when provided on the article is included in the Author Affiliation or Address field.

Example: LM is the abbreviation used for NLM when grant numbers are assigned. To search for citations to references that indicated that support was from an NLM grant, enter:

lm [ad]

Caution: You may get false hits from other information provided in the Author Affiliation field.

PubMed's online Help includes a table listing Grant Abbreviations and Institute Acronyms.

Limiting to citations with abstracts

- Use the value: hasabstract

Do ***not*** use a field qualifier; just use the search value.

Example: baseball AND jsubsetaim AND hasabstract

Remember you can use the check box in Limits to restrict to only items with Abstracts.

N O T E S

Practice Exercises

Use search field abbreviation when doing these exercises. Remember you can use the History feature to combine searches.

1. Find references to articles discussing decision-making by nurse practitioners.

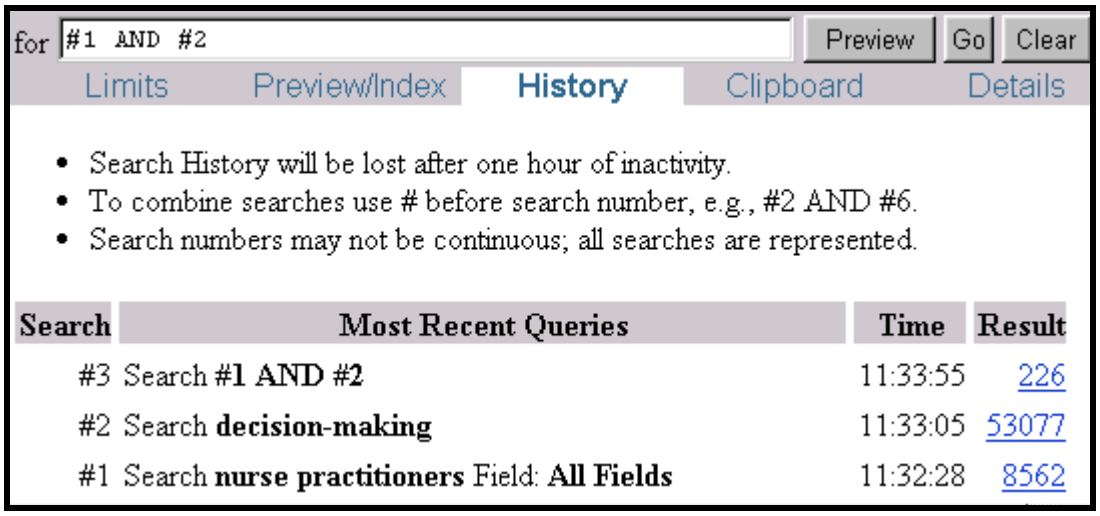
2. Find references to articles about Winston Churchill.

3. Find references to articles discussing video display terminals and carpal tunnel syndrome. Use the Related Articles feature to find similar articles. Limit the list of Related Articles to the publication type, Review. (Hint: Use History.)

4. Using the MeSH Browser, find citations to articles about the prevention of chickenpox or measles during pregnancy. Limit to English language articles that have abstracts.

Suggested Answers

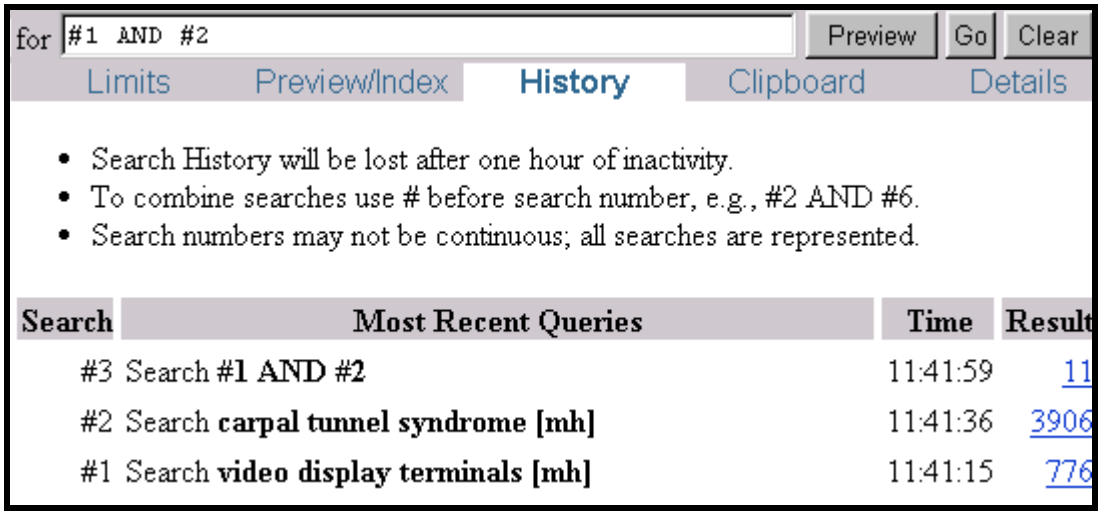
1. Find references to articles discussing decision-making by nurse practitioners.



2. Find references to articles about Winston Churchill.

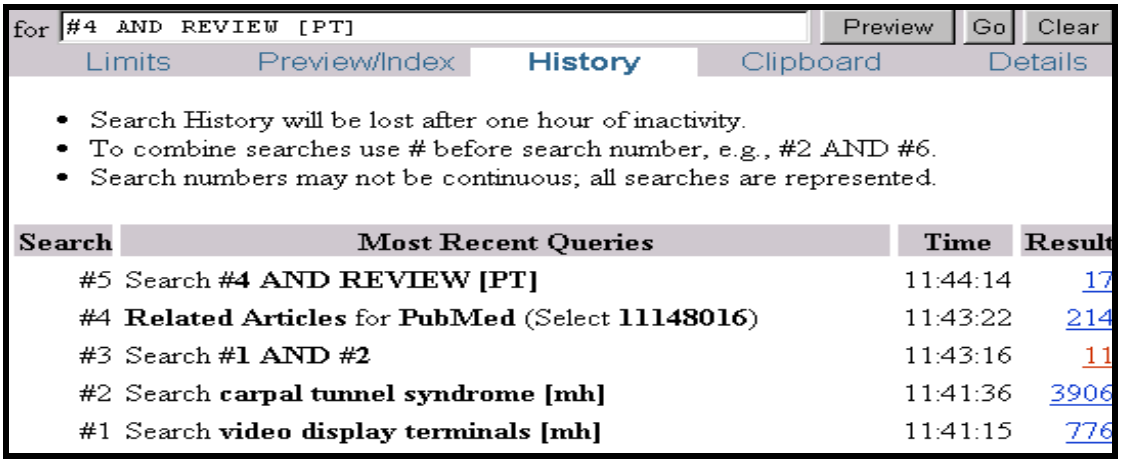
3. Find references to articles discussing video display terminals and carpal tunnel syndrome. Use the Related Articles feature to find similar articles. Limit the list of Related Articles to the publication type, Review. (Hint: Use History.)

   History screen:



Limit the list of Related Articles to the publication type, Review. (Hint: Use History.)

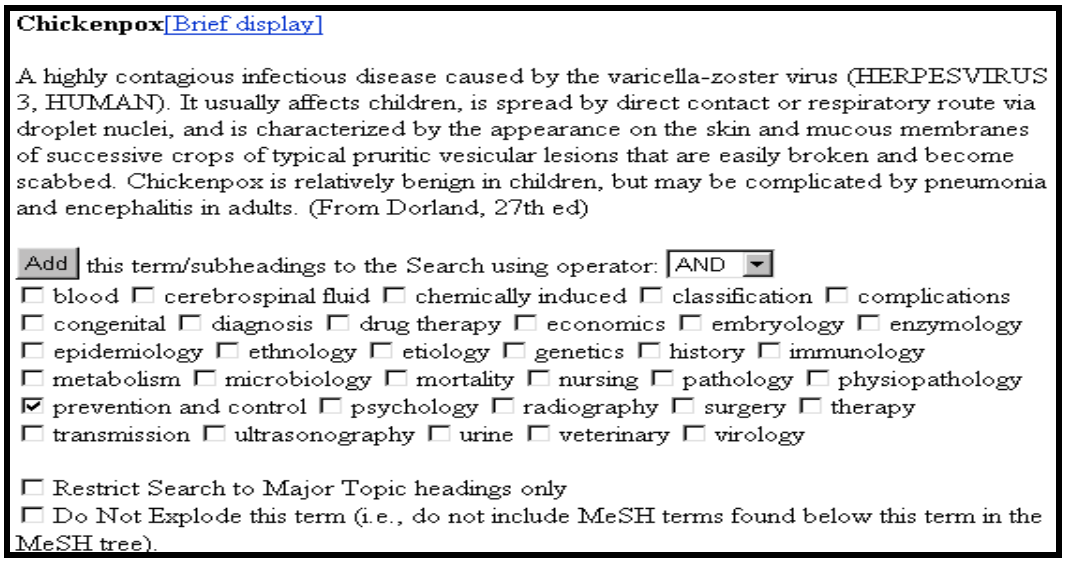
Final History screen:



4. Using the MeSH Browser, find citations to articles about the prevention of chickenpox or measles during pregnancy. Limit to English language articles that have abstracts.

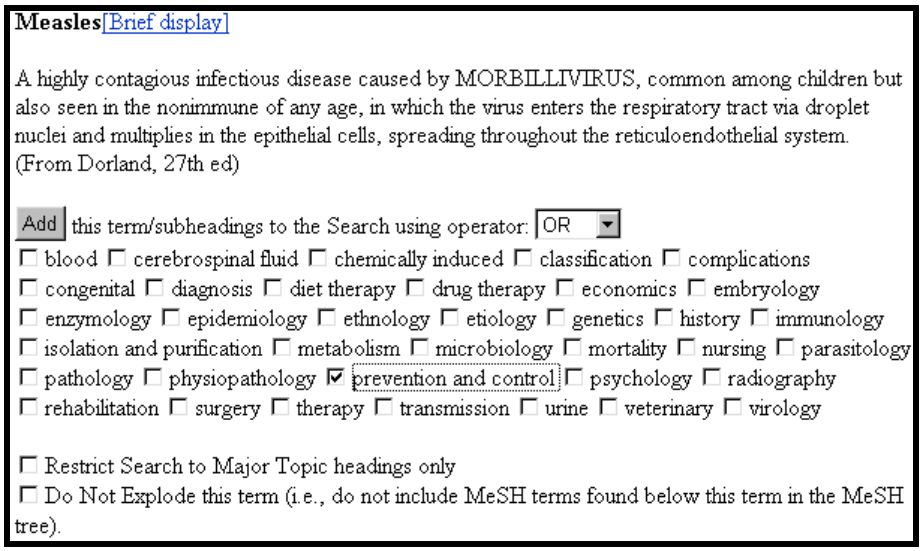
Detailed Display screen for the MeSH term Chickenpox with the subheading prevention & control selected:

*Click on **Add** button to begin to build your strategy.*

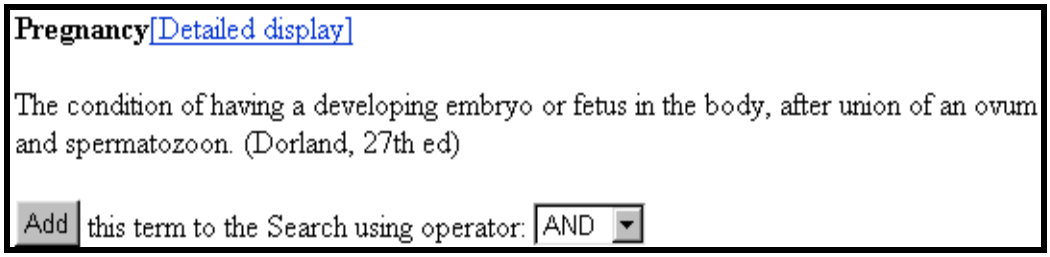


Next, you look up measles and display the detailed screen. Select the prevention & control subheading:

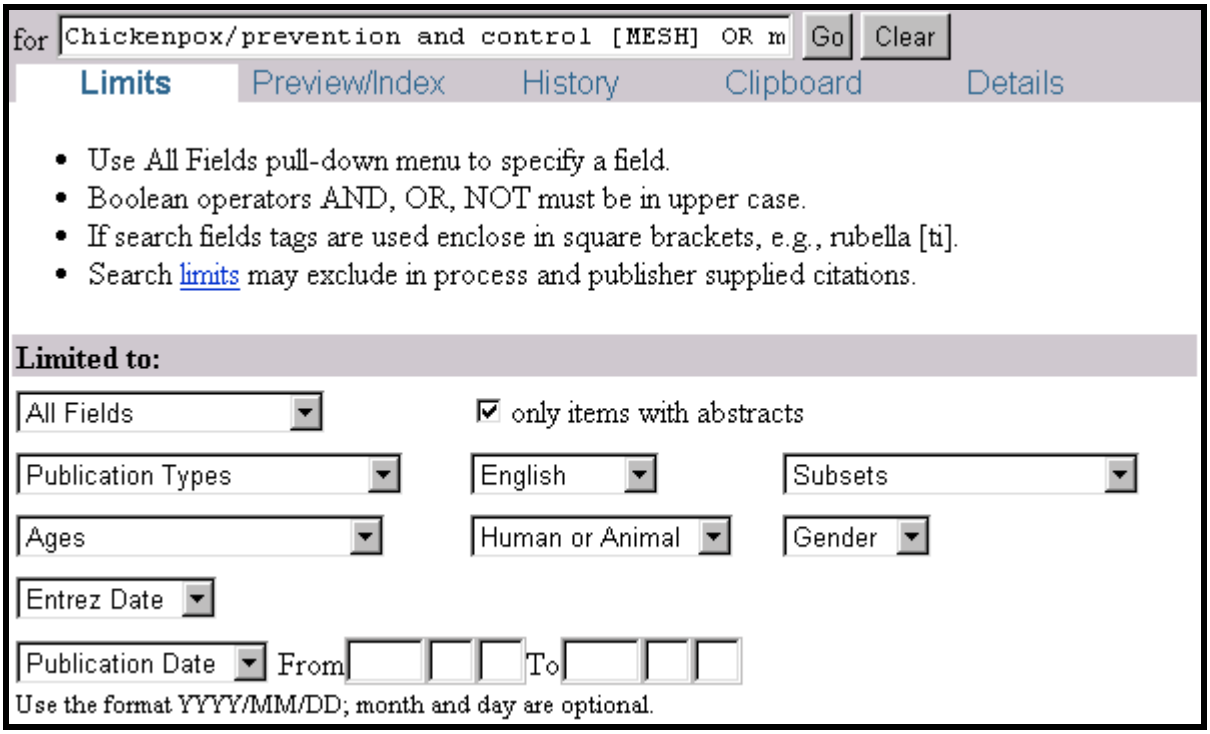
*Select the **OR** operator. Then click on the **Add** Button.*



Next, enter pregnancy. No need to look at the detailed display, so just click on the Add button to AND this term into your strategy.



Next, click on the **PubMed Search** button from the MeSH Browser screen to run the strategy in PubMed. From the Results screen, click on **Limits,** select **English** from the **Languages** pull-down menu, and select the box next to **only items with abstracts.** Click the **Go** button.



N O T E S

Clinical Queries

This specialized search query is intended for clinicians and has built-in search « filters » based on research done by R. Brian Haynes, M.D., Ph.D. at McMaster University in Canada.

Four study categories or filters are provided :

- therapy
- diagnosis
- etiology
- prognosis

Two emphasis categories or filters are provided :

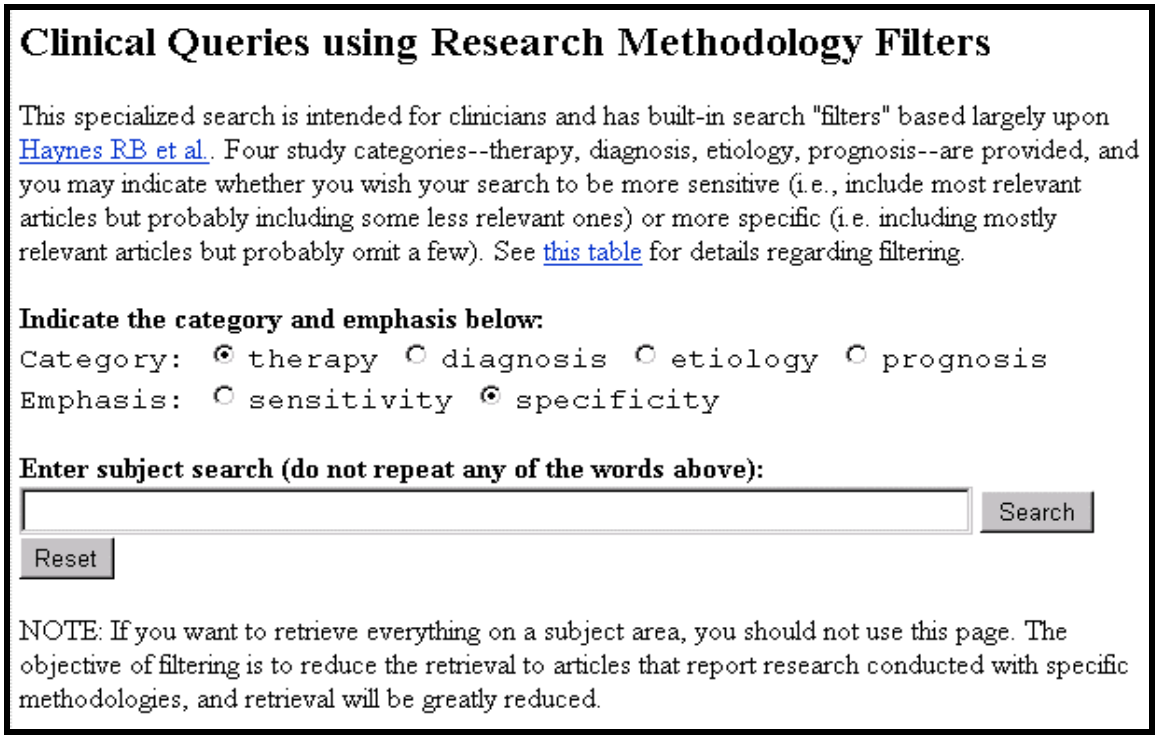
- sensitivity (also referred to as " recall" -- includes relevant articles but probably some less relevant; will get more retrieval)

- specificity (also referred to as " precision" -- will get less retrieval)

How to get there

- Click on Clinical Queries on the PubMed homepage sidebar to access this search feature.

Clinical Queries Screen :



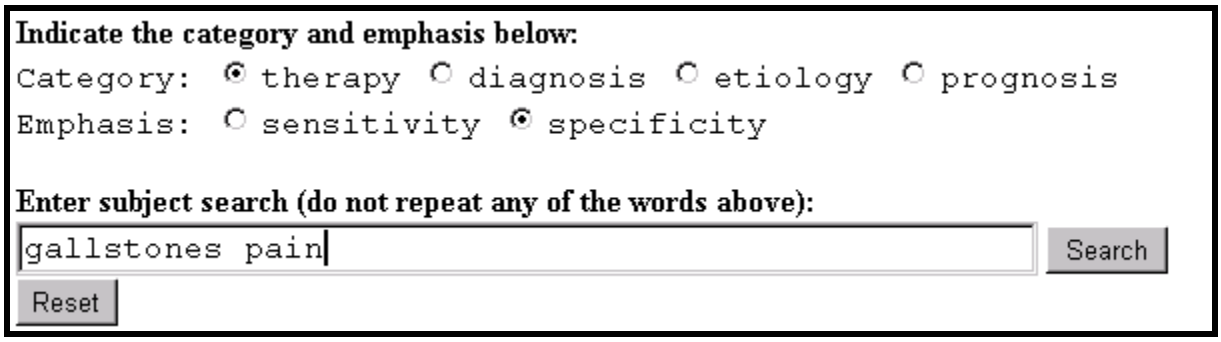
Link to Haynes citation.

Link to details about filtering.

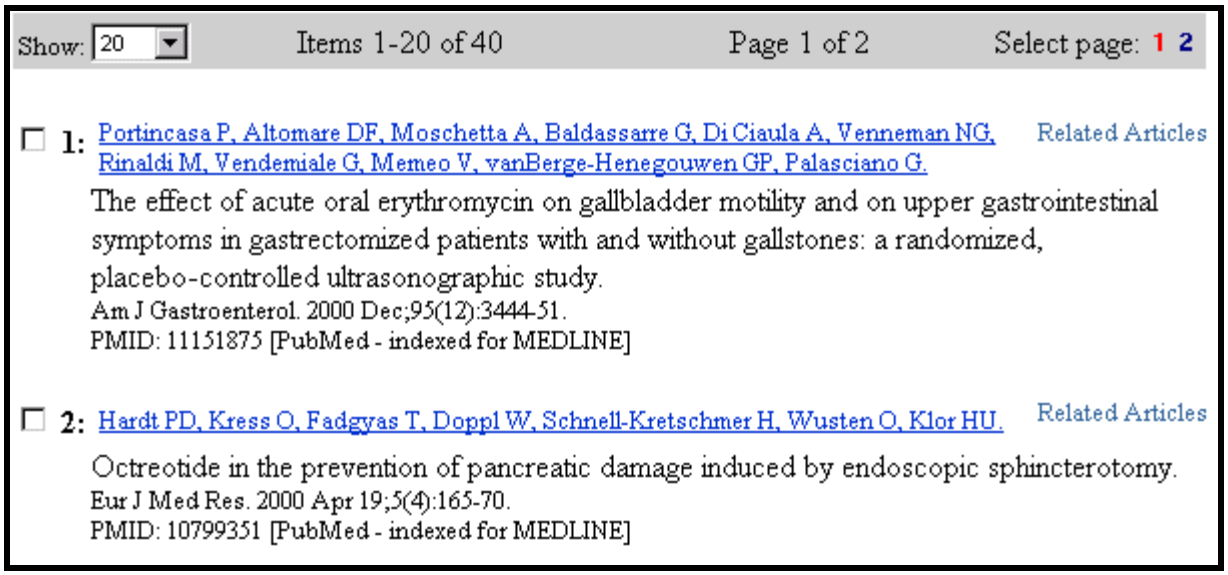
The **Clinical Queries** page has a link to the Brian Haynes citation and abstract for the article in MEDLINE discussing this research. You can also link to a **Table for Clinical Queries using Research Methodology** filters that shows a listing of terms using the PubMed search engine.

The default filter category is **Therapy**.
The default emphasis is **Specificity**.

Search example : **Gallstones and pain** – using the Clinical Queries defaults of Therapy and Specificity.

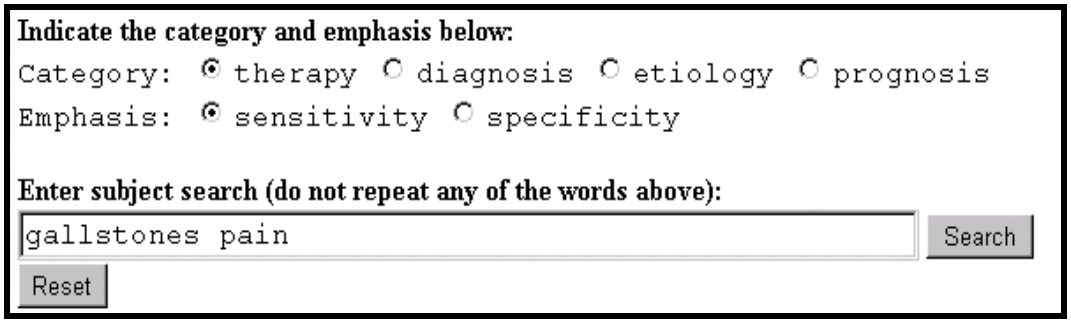


Search results using Therapy category and specificity emphasis :

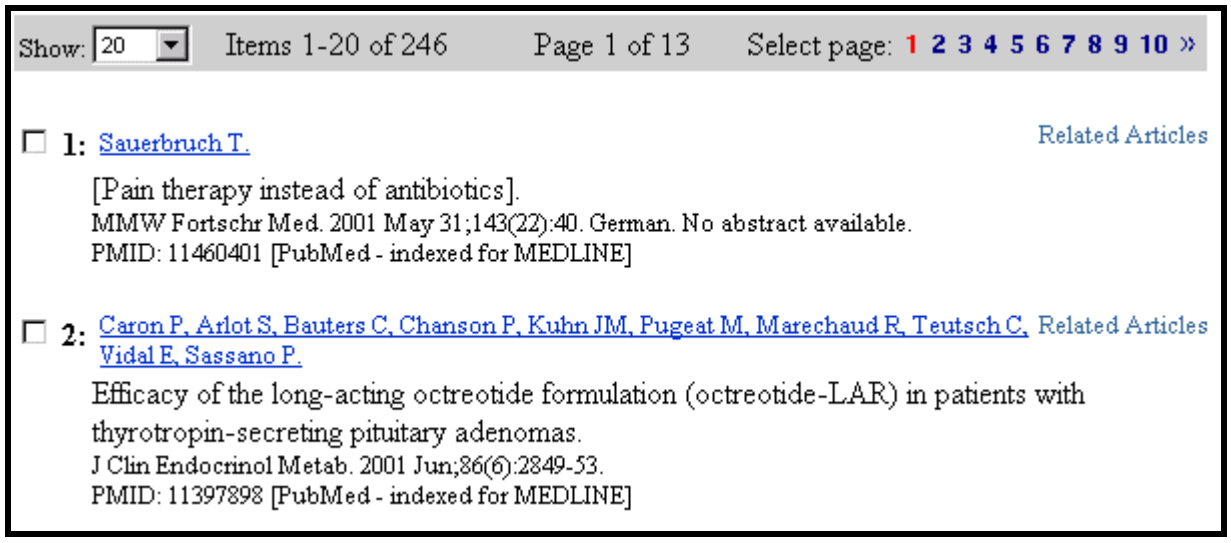


Repeat the search again on gallstones and pain using the category **therapy** and the emphasis **sensitivity**. We should see *higher* retrieval.
Search screen :

Select here.



Search results using **Therapy category** and **Sensitivity emphasis** :



N O T E S

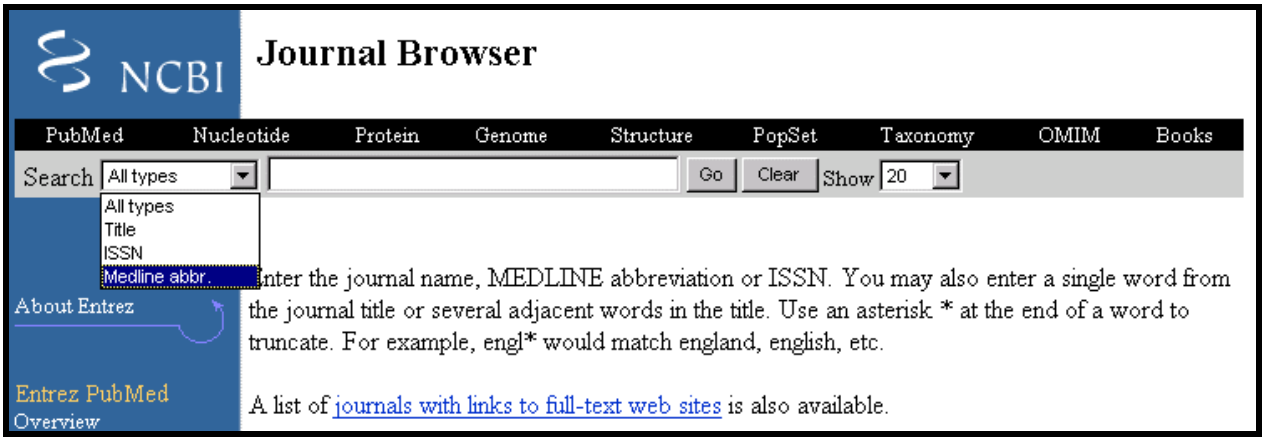
Journal Browser

The PubMed Journal Browser allows you to look up information about a journal in PubMed and search for citations from that journal. You can locate a journal using :

- Title
- ISSN (International Standard Serial Number)
- MEDLINE journal title abbreviations

How to get there

- Clicking on the Journal Browser link from the PubMed homepage sidebar takes you to Journal Browser screen :



- Click on **journals with links to Publisher Web sites** for a list of full-text journals available on the Web to which PubMed is currently linked. New journals are regularly added.

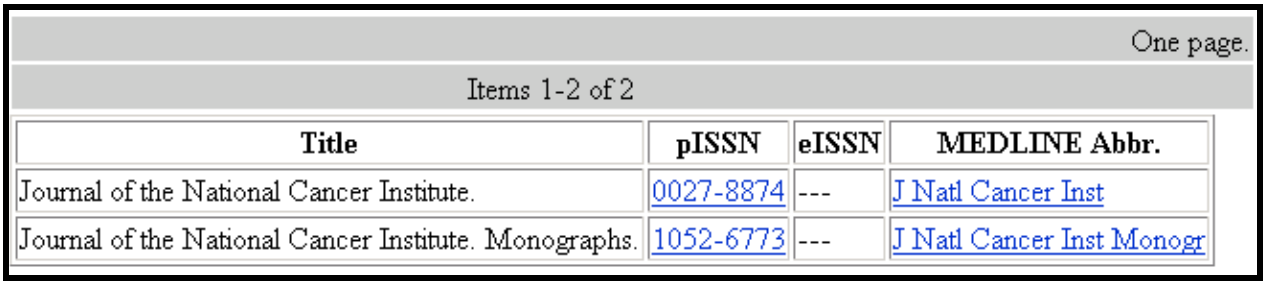
- Some journals may require that you register, subscribe, or pay a fee in order to view the full text of an article.
- Contact the journal publishers as noted on their individual Web sites for specific access information.

Journal Browser Screen :

- Enter the journal information.
- Click on the **Go** button to run the search.

Example: *Journal of the National Cancer Institute*

Result:



One page.

Items 1-2 of 2

Title	pISSN	eISSN	MEDLINE Abbr.
Journal of the National Cancer Institute.	0027-8874	---	J Natl Cancer Inst
Journal of the National Cancer Institute. Monographs.	1052-6773	---	J Natl Cancer Inst Monogr

- The **MEDLINE abbreviation** link will search PubMed for citations to that journal.

- The **ISSN** link will take you to a commercial Web site called PubList.com, which provides further information about the journal.

Single Citation Matcher

The **Single Citation Matcher** allows you to find a single citation using bibliographic information such as a journal name, volume, issue, page number, publication date, and title words.

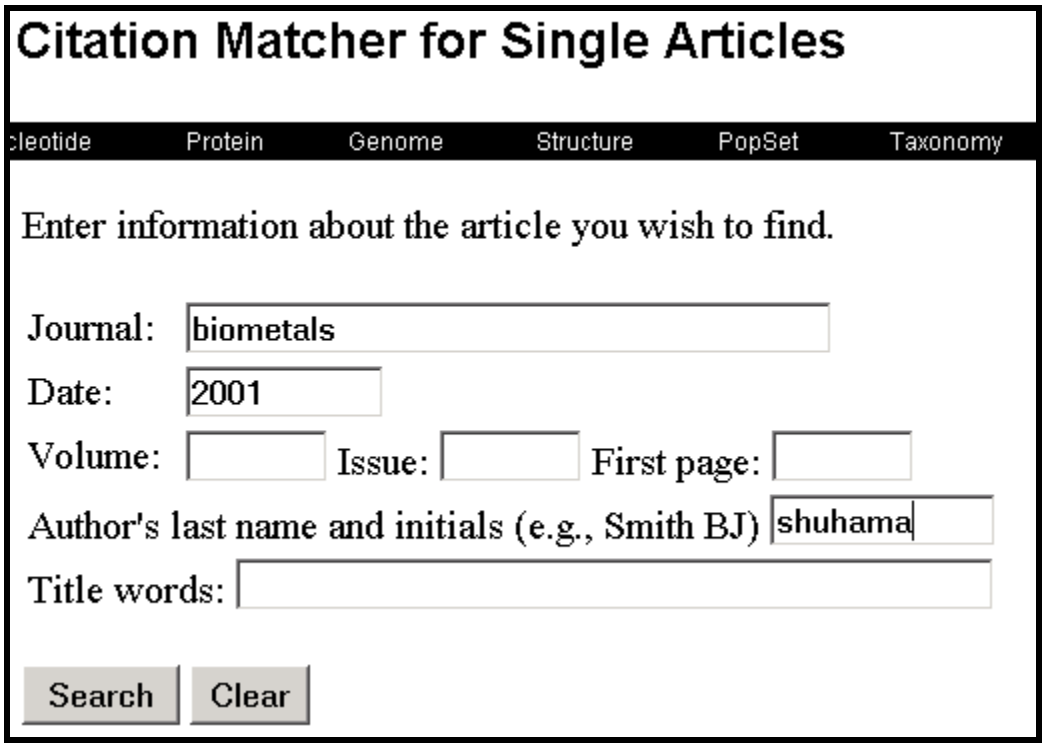
The **Single Citation Matcher** can also be used to get a "Table of Contents" listing of items indexed from a particular issue of a journal. Caution : Remember some MEDLINE journals are selectively indexed and there are indexing policies which might mean that not every item from every journal will be in the database.

How to Get There

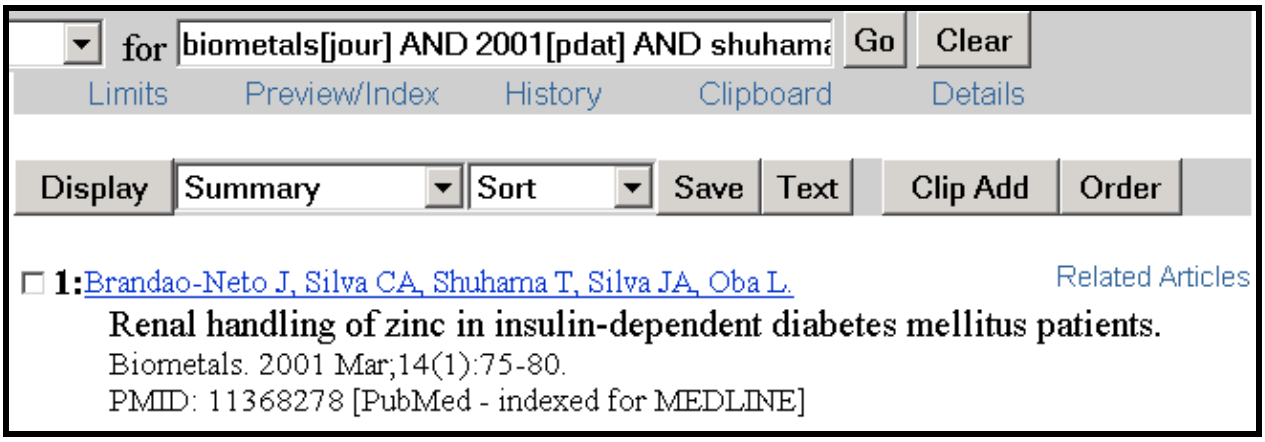
- Clicking on **Single Citation Matcher** on the PubMed homepage sidebar takes you to the Citation Matcher for Single Articles screen :

Example: *Biometals*, 2001, one author is Shuhama

- Enter as much information as you know, only one field is required.
- PubMed will inform you if it can't find a match with the information entered.
- Click on the **Search** button



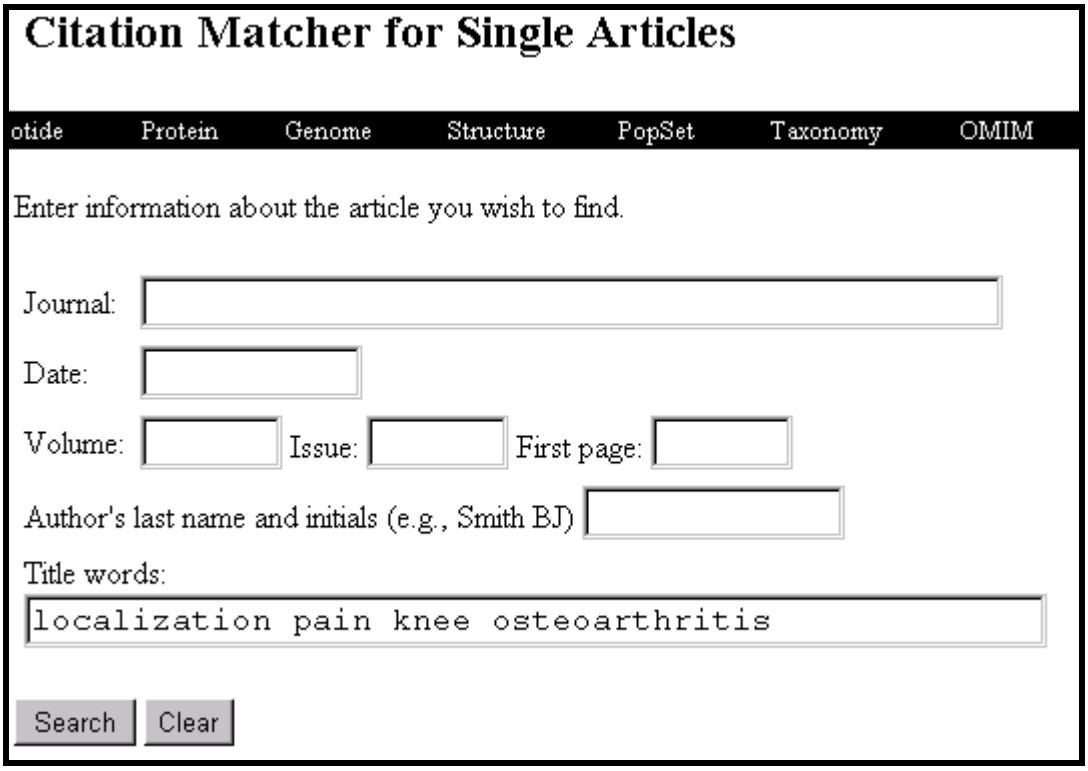
Result:



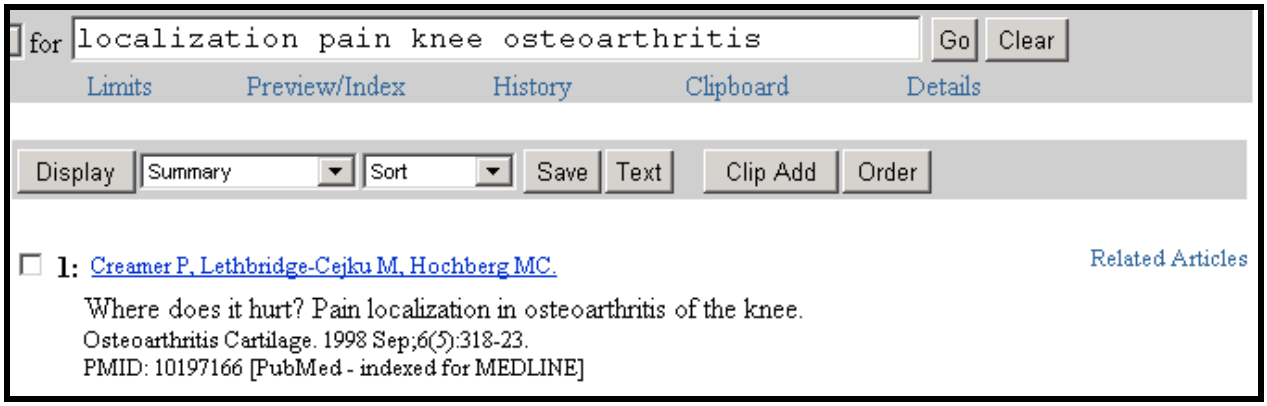
If you know four or more significant words from the title, that is often all that is needed to locate a reference.

Example: *You are looking for the citation for an article entitled, "Where does it hurt"? Pain localization in osteoarthritis in the knee."*

- Enter significant words from the title.
- Click on the **Search** button.



Result:



The **Batch Citation Matcher** allows you to retrieve the PubMed ID's for many articles all at once. The feature requires that you enter the bibliographic information (journal, volume, page, etc.) in a specific format.

The Batch Citation Matcher is primarily a tool used by publishers to check their electronic submissions and links.

N O T E S

Practice Exercises

Try to find the references using the following information and PubMed's Single Citation Matcher :

1. Arthritis Rheum
1982
page 1271-7

2. R. G. Johnson
Journal of Thoracic and Cardiovascular Surgery
Jan 1998
Page 148

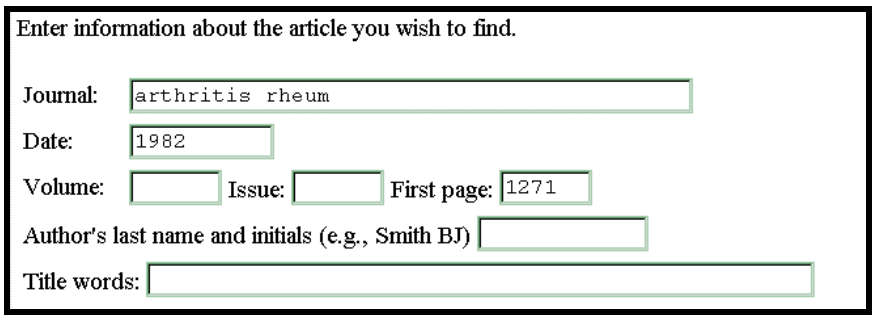
3. V. Lee
Biochemical Pharmacology
Vol. 29
Issue 14

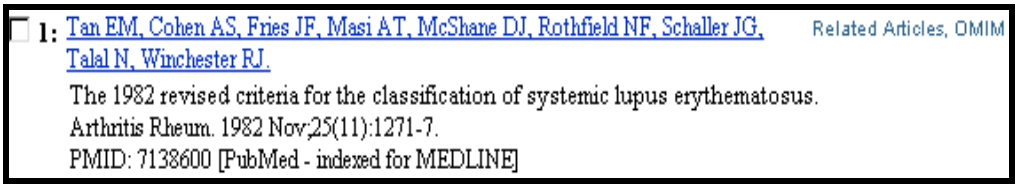
4. Vojvoda
Lancet
Jan. 6

Suggested Answers

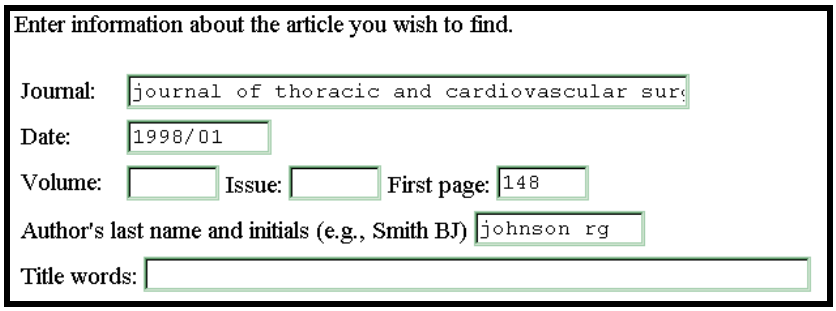
Try to find the following references using the following information and PubMed's Single Citation Matcher :

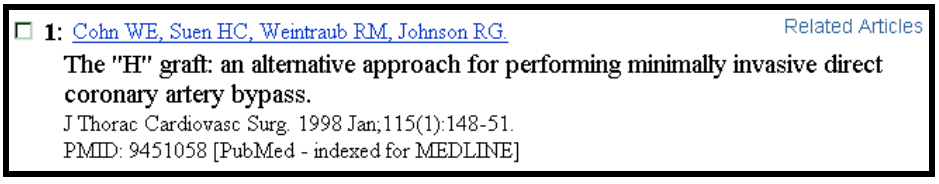
1. Arthritis Rheum
   1982
   page 1271-7



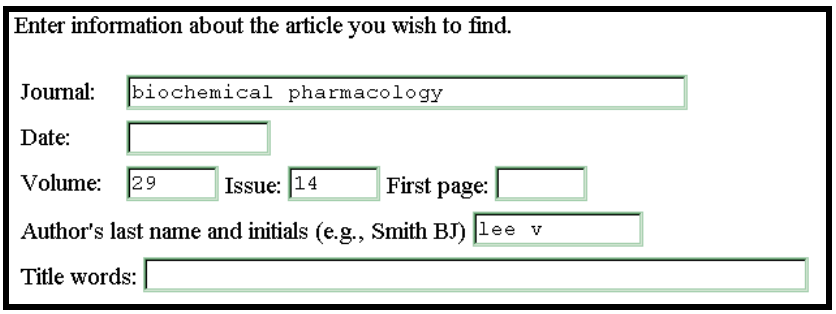


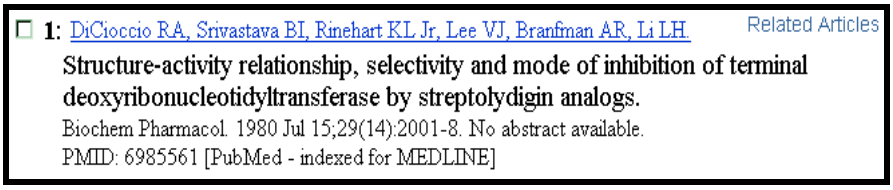
2. R. G. Johnson
   Journal of Thoracic and Cardiovascular Surgery
   Jan 1998
   Page 148





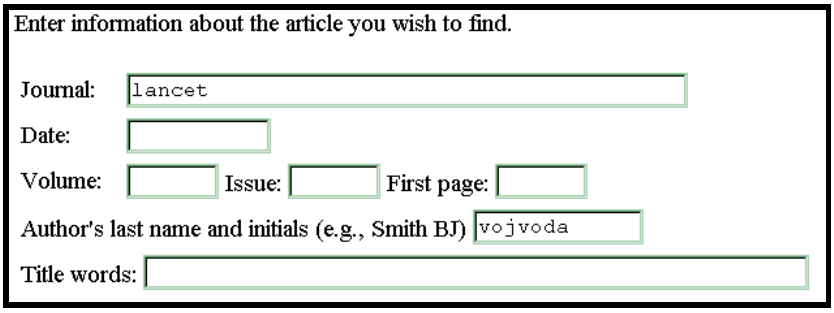
3. V. Lee
   Biochemical Pharmacology
   vol. 29
   issue 14





4. Vojvoda
   Lancet
   Jan. 6

Without the publication year, the month and day are not helpful. Fill in the form with the significant information you have.



N O T E S